MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE.

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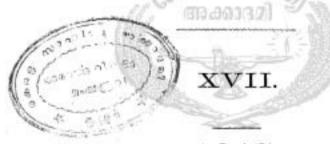
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PUBLISHED UNDER THE DIRECTION OF THE

ROYAL ANTHROPOLOGICAL INSTITUTE

OF

GREAT BRITAIN AND IRELAND



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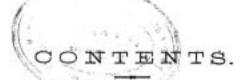
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ERRATA.

No. 2, page 8, line 17, for Scoresby Houtledge read John Roscoe. No. 101, page 153, line 27, for 19th read 18th. No. 120, page 177, line 30, for Hlodonin read Hlodomir.

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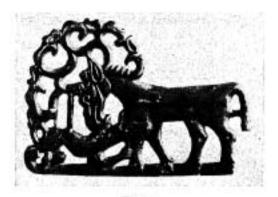




Fig. t.

Fig. 2,

SIBERIAN BRONZES.



F1G. 3.

CHINESE JADE MONSTER.

RAMA VARMA RESEARCH INSTITUTE, TRICHUR, COCHIN STATE.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE.

PUBLISHED UNDER THE DIRECTION OF THE ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.

N.B.—All communications printed in Max are signed or initialled by their authors, and the Council of the Institute desires it to be understood that in giving publicity to them it accepts no responsibility for the opinions or statements expressed

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ORIGINAL ARTICLES.

Archæology.

With Plate A

BIO CHOUSE VI

Read.

Siberian Bronzes and Chinese Jade. By Sir C. Hercules Read.

The plate shows two interesting bronze castings of Siberian or Scythian origin and a moustrous animal in jade. The two former were secured recently in a London saleroom by Mr. Louis Clarke, who has generously given them to the British Museum. The jade monster is the property of Mr. Oscar Raphael, F.S.A.

I append a detailed description of each.

1. Bronze pierced plaque, convex in front and concave at the back, representing an unimal with a horse-like body and griffon head and ibex-like horn standing calmly while a wolf-like creature attacks it by biting its foreleg. From the back of the latter rises a series of curved designs simulating birdheads with pear-shaped sinkings. From one of these curves just above the wolf's tail projects a small hook. The tail of the horse has been longer, like that of the following specimen; the fractured surfaces are filed. Smooth green patina. Figured back and front full size in Féng Yün P'êng, Chia Shih so, 1823, Vol. I, Cap. 4 (Chès So, Coins). It is there described as a horse coin, and the design as two borses, a large and a small one, like mare and foal. No suggestion is made that it is not of Chinese origin. Length, 4.7 ins. (Fig. 1).

Of this and the following specimen there is no history of any kind, and it is fortunate that Mr. Clarke's perspicacity enabled him to recognise their unusual

character and interest.

This plaque is identical with a figure in the Chinese work on Ancient Inscriptions on Bronze and Stone, mentioned above. So exact is the resemblance between the plaque and the Chinese illustration that it is not impossible that we have here the actual example figured. The Chinese illustration is repeated by M. Salomon Reinach in his memoir on "La Representation du galop dans l'art ancien et

[1]

moderne," where he discusses not only this piece, but many others of the same class. This particular specimen he states to be almost identical with one of the most beautiful plaques at the Hermitage, acquired in 1844 from a Buriat, who, according to his own account, had it from his father, who brought it from Mongolia. Both M. Reinach and M. Chavannes agree that it has nothing to do with China, but must be an importation from Siberia, which, indeed, is sufficiently obvious.

One of the characteristic features of these Scythian plaques is seen in a marked degree here. The bronze evidently represents a fierce combat between the griffonheaded horse and the wolf, but nevertheless the whole pose of the former is calm and undisturbed, the attitude of the body and legs displaying no signs of excitoment, so that the fight would seem to be an entirely one-sided affair. This curious feature may be noted in nearly all the numerous examples shown in Minus' Scythians and Greeks, in the albums of the Khanenko collection, and in the article in the Revue Archéologique. Another peculiarity, equally typical and more readily marked, is the presence annexed to the general design of a number of gratuitous curves, which in some cases develop into an independent design and display the heads of birds, griffons, and other abnormal creatures. In the present specimen it is not easy to discover any reason for the presence of this mass of openwork curves that surround the horse's head, the lines of which would eventually merge into birds' heads if they have not already done so. In a good number of instances this subsidiary development is more prominent than the main design, which is often nearly extinguished (c.g., Minns, Fig. 129, 196, 197).

2. Bronze pierced plaque, convex in front and concave at the back, representing a combat between a lioness and an eagle. The former grasps with his jaws the legs of the bird, which has a firm grip with its beak on the lioness's neck. The eagle's wings and tail are treated conventionally, being indicated by curved lines and baving curled ends. Greenish-grey patina. Length 4.8 ins. (Fig. 2).

In its general characters this piece resembles the last, the lioness in its pose being conspicuous for the absence of any violent action, but the openwork curves are replaced by a feature as characteristic, viz., the purely ornamental treatment of the wings of the bird. For the artist they have consed to be members having any functional qualities, and the contours have been adapted to the ideal outline of the plaque. An instance of the same treatment is seen in Minus' Fig. 199, a gold plate with coloured inlay from Siberia, in which an eagle is attacking a yak; while a similar development of the horns of a deer is shown in his Fig. 183, where the conventional treatment of the horns suggests a palmette on the top of the animal's head. Similar decorative vagaries are to be found scattered throughout Mr. Minus' work.

3. Quadruped, cut from a flattish oval pebble of grey jade. The animal is in a crouching posture with the right fore-foot advanced before the chest, the back hunched up, and the neck curved in a swan-like attitude. The limbs are edged with undulating waves, and the feline type of tail is curied under the body. The most remarkable feature is the head. The jaws project, the mouth being partly open, showing saw-like teeth, terminated by large upper canines, incurved, and touching the lower jaw, nostrils drilled through. The upper part of the skull is bulbous, with deeply pierced eyes, the ears pointing forwards and marked with herring-bone lines at the edges. Under the jaw is a wave-like adjunct, looking at first sight like a paw. The paws are divided into five digits. The whole design is completed at the bottom by a sort of plinth, not unlike the general design of the two preceding bronzes (Fig. 3).

This jade monster is placed side by side with the two Scythian plaques, because though they may be widely separated in date, there is still an affinity between them. On the general question of such a relation, Mr. Minns makes some very apposite remarks. After discussing in detail a very large number of examples of Siberian and Scythian art of the type of our two plaques, he proceeds:—

"The remarkable art of which the examples have been discussed in the preceding pages evidently flourished in the Asiatic Steppes. One specimen (our Fig. 1, and Minns, page 251) generally similar to the plate from Verkhne-ndinsk, found its way to China, and is figured in the archeological work, Kin Shih so. There is some resemblance in character between Siberian and Chinese art; it may be due to some community of race, or perhaps one may have influenced the other; or the connection may go back even to Minussinsk days, or again, the resemblance may be due to both having borrowed from Tranian or some other Central Asian art; in each case we seem to have an intrusion of mousters ultimately derived from Mesopotamia, the great breeding ground of monsters. And so they finally penetrated to the horders of China, just as the Aramaic scripts twice traversed the same stretch in the cases of the Turkish and Uigur alphabets. The early Chinese bronzes and jade earrings . . . are very much conventionalised. . . . The Dragon, Tiger, and Phomix only come in under the Han dynasty, and decidedly recall Persian types, e.g., the Simurg, but the way in which their bodies are twisted about is rather in the Siberian spirit."

This is very true, and Mr. Minus himself discerned something of this Siberian spirit in Mr. Raphael's jade monster, and now by chance we are able to place it side by side with two most characteristic examples. As a type of animal or monster, I do not remember to have seen anything like it in Chinese sculpture, though monsters are common enough. The general design, though not unlike Chinese, yet recalls many of the contorted Siberian beasts (e.g., Minus, Figs. 198, 200) in its main outlines. Generically, as an animal, moreover, it has an affinity with a number of queer creatures of the early Iron Age from Perm, Tobolsk, and the Petchora." The paws are the same, and the conventional flames or clouds on the jade might well be the remote descendants of the lituus-like lines on the Early Iron Age creatures. There is, moreover, a very un-Chinese character about the head of the jade beast, with its rounded forehead, and long powerful jaws are furnished with an armature of saw-like molars and powerful canines that nearly resemble the same features in the wolf in Fig. 1.

Mr. Minns, in the paragraph I have quoted, has given a hint as to the relations of this Siberian and Scythic art, and his book, admirable in both senses, contains both a digest of all that has been written on the subject, and his own very valuable deductions from the facts he has gathered. It would seem to be unquestionable that many well-known features of our pagan Saxon art, and that of Western Europe generally, have their roots in this Siberian culture, and it is even claimed that Carlovingian art is equally in its debt.† It seems fully as clear that though the florait of Siberian art runs through the centuries just before and after the beginning of the Christian are, yet an unbroken line of ancestry can be traced backwards well into the Bronze Age. Thus in length of time we have a pedigree of no mean importance, while the geographical distribution forms an equally important and much more puzzling feature. One point seems to stand out in clear relief, viz., the practically indigenous character of the Scythian and Siberian art. If one finds, as seems certain, that the prototype of so stylistic a creature as the reindeer, with the wildly exaggerated homs, is already in existence in the Bronze Age in Siberia, it is hard to believe that he is of any-

^{*} Aspelin, Antiquités du Nord Finne-Ougriss, Figs. 551-553.

[†] Appeigren-Kivalo in Oprescula-Oscari Montelio, 1913, p. 365.

thing but native growth, and equally hard to guess from which of the surrounding culture areas he can possibly have been derived.

Scythian remains are rare in this country, and until the publication of Mr. Minns' monumental work were but little known to the outside world. His book will provide enough for most inquirers; if any of them want to go further affeld, he has given them ample references to the Russian and western literature of the subject.

C. H. READ.

Japan : Folklore.

Hildburgh.

The Directing of Conscious Agents in some Japanese "Imitative" Magical Practices. By W. L. Hildburgh.

In analyses of magical operations the assumption is generally made that the mimicking of a desired effect is due to a belief, or at least to an undefined feeling, that the mere representation of that effect, or of some of its more salient characteristics. will be reproduced in the manner that the operator has in mind, without the intermediation of any conscious agent-that is, briefly, that of itself "like produces like." In Japan, although there is a much greater body of homeopathic magical practices in which there seems to be, at least at present, no trace of an appeal to, or of an attempted constraint of, a supernatural being, there are many magical (or magicoreligious) practices which, although they may seem when superficially regarded to be truly homeopathic in nature, appear when examined more closely to be in reality performances for the purpose of indicating to some supernatural being the direction in which it is desired that that being should exercise its powers. Whether some of these practices may have originated as true homeopathic magic, and have been later adapted to conceptions based upon a belief in supernatural beings, or whether homeopathic practices in which no conscious agent at present appears may in some cases have been derived from forms in which such agents originally appeared, are questions into which I have no intention of entering here."

The symbolical conveyance of good wishes is still a very common feature of Japanese life—we find it in connection with the giving of presents on various ceremonial occasions, and in the accessories used on certain occasions, such as the New Year's festival—even though the objects used for this purpose and symbolically at the present time may not originally have had the meanings attached to them to-day.

An excellent, and seemingly unmistakable, example of the conveying of information to supernatural beings by mesas of a symbolical performance occurs in the legend of the hermit En no Shō-kaku, who, when he wished to creet a temple at Yoshino "to the god who might be fittest to ensure the salvation of the human "rece," after having rejected Jizō as being too mild, and then Mi-roku, "spent seven "days more in an upright posture, with glaring eyes and clenched fists, so that the gods might better understand the nature of his requirements, until at last there "stood before him a being pale with concentrated rage,"†

The mode of application to the conscious agent whose powers are involved is sometimes (i) more or less clearly in the nature of a prayor, sometimes (ii) in the nature of compulsion by means of an action believed to be of an irritating nature, sometimes (iii) of an indefinite nature seemingly intended as a sort of vague appeal to, or reminder for, the conscious agent involved.

^{*} The definition of magic (segisset) given by Yamada, a modern Japanese lexicographer, quoted by Aston (Shinto, p. 827)—"The keeping off of calamity by the sid of the supernatural power of "Kami and Buddhas"—although, as Aston points out, too wide in certain respects and too narrow in others, is worth citing here as possibly indicating a current of thought allied to that which seems to run through magical practices of the types about to be discussed.

- (i) The following examples seem to be in the nature of prayers :-
- (a) In order to preserve a house, during a confiagration in the neighbourhood, from the danger caused by sparks falling upon the (often inflammable) roof, a cup of water is offered before the picture of a certain Fire-god, sparks are struck, by means of a flut and steel, so as to fall into the water and be extinguished, and finally the water is thrown upon the roof of the house [recorded at Yokohama]. The symbolism here seems clearly to be an appeal for the god to make his instruments, the flying sparks, innocuous with respect to the roof upon which the water is thrown; since, however, sparks are sometimes struck by means of a steel for purposes of purification, and there is also the possibility of the misplacement of a part of the rite in popular practice, it may be that some other interpretation should be placed on it.
- (b) In certain mountainous districts, when there is a drought, some of the men climb the highest peaks accessible—which are thought to shelter the most powerful of the divinities of the class invoked—on Amagoi ("praying for rain") expeditions. The men build a boufire before the shrine on the top of the peak, and then fire off guns, shout, and roll boulders down the mountain side, in order to represent the storm they desire."
- (c) In ancient times, a black horse was offered, in addition to the offerings generally made, when praying for rain to the gods of certain shrines, because black is the colour of the rain-clouds; a white horse was offered when fine weather was desired.†
- (d) At the San no miya at Nikkō, "It is believed that pregnant women may "obtain a safe delivery by offering up here pieces of wood, such as are used in "the Japanese game of chess, inscribed with the Chinese character for 'fragrant "chariot." As the "fragrant chariot" of the game of shōgi is permitted to move forward freely, but is debarred from moving either aldeways or backward, we may reasonably assume, I think, that the offering of the piece mentioned is intended to indicate to the divinity the applicant's desires concerning the straightforward path of the child (or, perhaps, course of the birth).
- (ii) In the following examples the supernatural beings applied to are caused to become irritated, and the symbolism is used, seemingly, in order to indicate in what directions the operator's wishes lie:—
- (c) The Ushi toki mairi is, as I have pointed out in "Notes on some Japanese" Magical Methods for Injuring Persons" (Man, 1915, 65), a practice in which a tree-spirit is angered by the driving of nails into its dwelling-place, so that it goes forth to seek vengeance. The likeness of the victim, which is nailed to the tree, is, I have suggested (loc. cit.), probably intended in at least some forms of that practice to indicate to the offended tree-spirit the person to be injured and the manner of the injury desired.
- (f) Since the publication of the "Notes" above mentioned, another method of injury, of a similar kind, has been brought to my notice. In Chikuzen Province, in Kyūshū, until fairly recently, a person seeking to injure another might go, employing the utmost secrecy, into the forest near his village, and there, having selected a large pine tree, drive nails into the latter's roots, at the same time cursing his intended victim. As the result desired was that the victim should rot ("Aussarw"),

^{*} W. Weston, Mountaineering in the Japanese Alpe, London, 1896, pp. 160, 161.

[†] Aston, sp. cit., p. 287.

f Satow, op. elt., p. 416.

[§] In is, of course, open to argument that one of the seemingly truly homeopathic Japanese practices in which a person's likeness, of some kind, is subjected to injury, has been joined with a spirit-angering performance. The other examples of the present article seem to indicate, however, that the likeness is really intended as a means of guidance.

a pine tree was chosen in preference to a tree of any other species, because the resin exuding from its injuries resembled the putrescence of the sores to be inflicted upon the victim." A feature of peculiar interest in this majinai, in view of the large Malayan element believed to exist in the population of Kyūshū, is its close resemblance to a Sumatran practice which I have quoted (op. cit., p. 120) from The Golden Bough.

- (g) Another practice to which I have referred in the above-mentioned "Notes" (second section, in Man, 1915, 80) is that in which a picture of the Hashiri Daikoku is used for injuring a thief, the picture being inverted in order to irritate the divinity (Daikoku) involved, and a pin being driven through each foot of the picture (or into other parts of the body when injury other than laming is desired) in order, seemingly, to indicate in what directions the injuries should occur.
- (A) In order to secure rais, in times of drought, a black dog is stoned to death in the bed of a stream, so that blood (an unclean substance) shall lie about the place of the stoning, and the divinity of the stream is asked to send rain—the rainclouds are symbolised by the dog's colour, seemingly for the divinity's further guidance—in order to wash away the defilement.
- (iii) In each of the following examples a supernatural being appears, I think, although just what are the relations between the beings and the performances with which they are respectively associated do not seem to be very obvious:—
- (i) At Sagami, in a shrine, there is a round stone which is supposed to be the shintai (god-body) of a certain Rainfall-god to whom the shrine is dedicated. When rain is wanted, water is poured over this stone.
- (j) Beriberi (kakke) is a disease which seems, in Japan, often to be popularly attributed to an excess of water in the sufferer's system, and many of the magical treatments for it appear to be based on the idea of getting rid of the supposed watery excess. In one of the treatments recommended for kakke, the patient is to walk three times round a well, carrying a piece of bamboo over his shoulder and reciting a formula (literally, "Bottomless kakke, kakke as for bottomless") explained to me as signifying "Kukke, run through my body as though there were nothing to stop you" [recorded at Yokohama]. It is possible that the introduction of the well into this majinai may be due to some supposed sympathetic connection between the water of the well and that of the disease, or to some idea that the patient's excess of water shall run into the well. I think, however, that it is much more likely that the marching round the well is intended as a means of appeal to the god of the well, because the intervention of a Well-god is very frequently sought in Japan for the relief of an illness or of some other bodily trouble—and in the case of an illness thought to be caused by water an appeal to a Water-god would seem

^{*} Another injury-sequence formerly in use, but less commonly, in the same district, consisted in making a small pupper, roughly formed of straw, sticking a great quantity of pins into it (so that no part remained uninjured) and simultaneously cursing the intended victim, and finally burying it in the ground. These operations also had to be conducted in the intmost secrecy. A Yokohama practice of a similar kind, lately reported to me, consists in the sticking of a seedle into a likeness—an image or a picture—of the intended victim, in coder to cause him to suffer. Why the implement of injury must be a needle instead of any other suitable pointed object my informant was unable to tell me, but the numerous Jepanese majines for various purposes in which a needle is mentioned, and certain beliefs and practices connected with needles, lead me to think that possibly the instrument in this case is regarded as serving in some manner as some sort of a conscious agent.

[†] a search and suggested (see, etc.) that a certain engined for catching a ranaway, consisting in the nailing of a shoe of the victim in front of the kitchen furnace, may not improbably be based on similar conceptions.

[!] Weston, ap. cit., p. 162.

[§] Aston, op. cit., p. 330.

to be even more to be expected than in the cases of, say, small-pex, or a stye on the cyclid, or the changing of the sex of an unborn child. The carrying of the piece of bamboo—a material commonly used for making water-pipes in Japan—would thus appear to be a method for expressing symbolically to the divinity of the well the desire expressed verbally in the formula recited during the performance.

- (k) If a marriage has been unfruitful, the old women of the neighbourhood, on the occasion of the festival of the Sahe no kami, certain phallic divinities, go through the form of delivering the wife of a child, using a doll to represent the infant.* Various escenarious are performed, in different parts of Japan, at the time of this festival, in connection with the propagation of children. I think it is possible that the date mentioned has been selected as especially suitable for the mimetic delivery in question, because the Sahe no kami are more likely to be present at that time than at any other, and that the performance is intended as a means for indicating to them the patient's need. We may note, in passing, that a childless wife is sometimes given by her friends, on occasions when presents are customary, a doll, as a ceremonial expression of a wish (or perhaps as a form of magic) that she shall bear a child.
- (I) Formerly, on the twentieth day of the tenth month, at a celebration held by merchants and shopkeepers under the patronage of Rbisu, "God of Wealth and guardian of markets," a picture of the god was hung at one end of the room in which the celebration took place, offerings of food and of drink were put before it, and mock sales were carried on amongst the participants in the celebration, these sales being intended to cause success in the future real transactions of the persons taking part in them.†

If, as seems to be shown by some, if not by all, of the above examples, certain actions are performed with the express intention of conveying symbolically to some supernatural being the operator's desires, it seems highly probable that other actions will be avoided for four lest some supernatural being witnessing those actions may be led to cause undesired occurrences which may be assumed to be symbolized by those actions, or, if he be normally protective, may at least be led to permit malevolent supernatural beings to cause such occurrences-that is, it seems probable that certain taboos have been based upon the principle which seems to underlie the examples of positive magic which have been described above. Although I am not at present able to cite any examples of taboos which have been given me as so based, I feel sure that, in view of the multitude of supernatural beings in whose actual presences the Japanese of former days believed himself constantly to movesome of whom (unless offended) he thought would shield him from harm, others of whom he feared-euch taboos exist. The taboos upon certain so-called "illomened" actions or words during certain periods, such as those connected in some way with the dead, or at night, or at the beginning of the New Year, may, I think, sometimes thus be explained, and all the more logically when we recall that even at the present time evils of all kinds are by many persons regarded as due to the malevolent actions of supernatural beings. W. L. HILDBURGH.

Anthropology.

A Red Indian Coiffure. By David MacRitchie.

MacRitchie.

In all those instances where the remnants of the Red Indian tribes of South America have censed to live the Indian life, and have been brought under the controlling influence of white civilization, they have more and more abandoned

^{* 1664,} p. 33L

[†] E. W. Clement, "Japanese Calendars," in Trans. Asiatic Sov. of Japan, Vol. XXX, pp. 52, 53; quoted from "The Japanese Months."

their ancestral customs, until, in some cases, these have disappeared altogether. It is, therefore, of importance that any obsolete or obsolescent custom should be recorded while it is possible. An extremely interesting characteristic of the Wasaji or Osage Indians that has come prominently before me has now probably reached the stage when all memory of it will soon be forgotten by these people themselves.

Mr. George A. Dorsey, Curator, Department of Anthropology, Field Columbian Museum, Chicago, in the brief Preface to his Traditions of the Osage (No. 88 of the Field Columbian Museum's Publications, Chicago, February 1904), remarks as fellows :- "The Osage are of Siouan stock, and made their home, when first known " to the whites, in southern Missouri, northern Arkansas, and eastern Kansas. In " 1871 they were removed to a reservation in the north-eastern corner of Oklahoma. " which they still [1904] occupy. They are degenerating rapidly, are very lazy, " and much addicted to drink; the use of the peyote or mescal [a bitter but in-" toxicating liquor, brewed from small red berries] among them is rapidly increasing. " It must be admitted that this collection of tales does not adequately represent the " traditions of the tribe. This is largely due to the difficulty of engaging the " attention for any length of time of the old men of the tribe, for reasons above " mentioned."

Living as pensioners of the United States, no longer hunters and warriors, but sunk into the condition of artisans and peasant-farmers, with here and there a man or woman of college training and professional career, these Indians are rapidly losing touch with their ancient tribal customs. One of these customs, however, is described in a book which has lately come under my notice, Life in the Far West, by George Frederick Ruxton, author of Travels in Mexico, &c., published by William Blackwood and Sons, Edinburgh and London, 2nd edition, 1851. Anyone who knows the country and people described can see that the scenes and experiences portrayed in this book are true; although they are strung together by a slender thread of narrative which may be partly fictitious. The following passage, relating to incidents taking place in the year 1830, or thereabouts, occurs at page 78 :-

"Passing the Wa-ka-rasha, a well-timbered stream, they met a band of Osages going 'to buffalo.' These Indians, in common with some tribes of the Pawnees, shave the head, with the exception of a ridge from the forehead to the centre of the scalp, which is 'roached' or hogged like the mane of a mule, and stands erect, plastered with unguents, and ornamented with feathers of the hawk and turkey. The maked scalp is often painted in mosaic with black and red, the face with shining vermilion. This band were all naked to the breech-clout, the warmth of the sun having made them throw their dirty blankets from their shoulders."

The above description is specially interesting to me, as I am able to confirm it from personal observation. In the month of February 1873, I was one of an " outfit " of bison-hunters who were operating in the then unsettled region of southwestern Kansas, and one day we found ourselves in the neighbourhood of a large camp of Osages. After ascertaining from one of the band, whom we encountered about a quarter of a mile from the camp, that a visit from us would not be resented, a number of us, leaving our weapons in the waggons under the charge of the rest of our party, followed this Indian to the camp. From the number of lodges, or teepees, as well as from the women and children who were largely in evidence, we estimated the total strength of the band at 100 or 150. They were, it appeared, a sub-division of a much larger band, owning the chiefship of "Sunset," a very able leader of some celebrity at the time. Most of the young men were out on the plains after buffalo. The chief was in his lodge, playing cards with some of his braves, and too proud to take any notice of a few casual hunters, unaccredited by the Government at Washington. The women were busy with the usual squaw-work.

some bringing in great bundles of firewood, gathered in the "timber" that fringed the stream; others engaged in dressing buffalo skins, stretched upon stakes, with the pelt undermost. In this occupation, the utensils they employed closely resembled the rake of a croupier at a gambling table, and with them they steadily and gently rubbed the raw hide, over which was spread a moist preparation, said (with what accuracy I know not) to consist largely of deer's brains. The young children were playing about, much as the children of other races do. Several lads of fourteen or fifteen were testing their skill in launching their iron-pointed arrows, in javelin fashion, at a slim sapling, displaying as they did so an almost unerring aim. But what greatly attracted our attention was the seated figure of an Indian, obviously a man of consequence, who was receiving the attention of a barber, armed with a large pair of scissors.

The chief regarded us in disdainful silence, but the barber was much more friendly, and playfully snipped a few hairs from the heard of one of my companions. It seemed quite appropriate that this coiffeur should know a little French, and that he should have some French blood in his veins, as I believe was the case. There is nothing surprising in this, for the great plains to the west of the Mississippi were at one time part of the vast territory of Louisiana, and memories of that time are still preserved in numerous place-and tribal-names. The word prairie is a permanent record of French influence on these western plains. The main point to be noted, however, is the appearance of this warrior's head. The scalp was shaved on both sides, leaving only a ridge of abort, brush-like hair, "hogged like the mane " of a mule, and standing erect," in the words of Ruxton. Ruxton describes this ridge as extending from the forehead to the centre of the scalp. My impression is that, in this instance, it stretched well beyond the coronal suture. The bare portions of the sealp were powdered with vermilion, as were also the checks of this personage. With regard to the disposal of the hair at the back of the head, my memory is at fault. Probably it hung in long plaits, after the Indian fashion. But what struck me most forcibly of all was that the stiff, stubbly ridge of hair along the crown of the scalp gave quite the effect of a Roman helmet, or of the helmet worn by modern French cuirassiers. Indeed, it is not impossible that the Roman and French belines obtains this idea from an ancestral custom such as that of the Osages. This is a matter of speculation. The important thing is to chronicle the existence of the eastom.

The Osages that I saw in 1873 were genuine "blanket Indians." That is to say, they were practically untouched by white civilization, although they did play eards and understood something of the value of dollars. Moreover, they possessed breech-loading rifles of the latest type. Apart from such details, they represented the true wild Indian. They condescended to inform us that they had arranged to make a raid upon the settlements when the grass was "that high"; and although, for some reason, they did not keep their word, they carried out such a raid in the following year. Their representatives to-day wear "store clothes," and are largely occupied in drinking mescal, according to Mr. Dorsey. It is more than probable that the fashion of dressing the hair which I have described is already obsolete.

DAVID MACRITCHIE.

Mathematics.

Migeod.

Supposed Duodecimal System in Burum Language. (See MAN, 470, 1916.) By F. W. H. Migeod.

If the Burum numerals indicate a duodecimal system, it is certainly a most important discovery. I think, though, it may possibly be found that there are errors in the list as supplied to Mr. N. W. Thomas, and these when corrected may modify the supposed discovery. My own list in The Languages of West Africa, Vol. II, p. 374, may also bear revision.

For convenience of reference I give this list :-

1. gwinin. 7. vitama.
2. beba. 8. luwit.
3. bitat. 9. shavitar.
4. binas. 10. likuru.

bituhun.
 likuru na agwinisi.

6. vichimen, 12. naveviba,

$(Note, -\hat{n} = ng.)$

From 1 to 5 Thomas and I agree. He has no 6, and the absence of this numeral shows that his informant, the Rev. E. Evans, did not know the language himself, and hence was quite likely to go wrong in some of the other numerals. In 7 we agree. In 8 I have a very strange word, but this is not uncommon to 8 in other languages, as its derivation is very varied. In 9 we agrees for the vi in my sha-vi-tar is apparently redundant, as it also is in my 12.

Thomas claims kero as 12, not 10; but my likers, which is evidently akin to it, is supported by the Bortisu language, which has ker for 10. He casts doubts on my 12, but he did not scrutinise it sufficiently, or he would have noticed that it equals likers no ve vibo, the word for 10 being very commonly omitted in West African languages. The ve is apparently redundant as in 9, being I think the same prefix as the early numerals have. Vibo equals beha of course.

I must here note that the Ga language of the Gold Coast, and some others, use 6 as a base for 7 and 8, e.g., 6+1, 6+2, instead of 5+2 and 5+3, as if they had a duodecimal system. They have not, however, but only recognise 10. The unit 12 seems to have lost itself. The looking forward to 12, if I may so describe it, is therefore not entirely strange to West African languages.

In Burum, if there is indeed a duodecimal system, sha would mean "less," so shantad (in Thomas's) = 12 less 3; shanbipa = 12 less 2, &c. Incidentally, however, sha in the Hausa numerals means "plus," and a particle she in Doai also seems to mean "plus." As, however, these languages, though neighbouring, are distinct, too much must not be insisted on from this recomblance.

In my list the only numeral compounded with sha is 9, which being 12 less 3, points to 12 as a unit in the system. That it should represent 6+3 is, I think, out of the question, 9 never being known to be so formed. My list, therefore, also seems to give some support to a presumed duodecimal system.

It still remains to deal with kore in Thomas's list. This I would wish to make 10, and to set it alongside shambips, thus making two side-by-side scales, which may be explained as follows. Up to 8 the native progresses uniformly from 1. Arrived there, however, he vacillates. The counting is a strain. He therefore jumps to a dozen and works backwards, accepting, however, 10 as entitled to a separate recognition whenever desirable. Should this suggestion be accepted Thomas has to find a new word for 12, but from the analogy of Ga it may not exist as a simple word, but be merely 10 + 2 compounded in the ordinary way as in my list.

Further light on the subject would be most welcome, and it is to be hoped that some one in Northern Nigeria will supply a correct list early to settle the question. F. W. H. MIGEOD.

Archæology: Ashanti.

Cardinall.

Stone Implements from Ashanti. By A. W. Cardinall.

The stone implements figured in the accompanying illustrations are from Ashanti, and all were collected within a few weeks. I found the first specimen

myself at Kukuom. Having shown it to the natives, I was told that they were found quite commonly, and soon some thirty specimens had been brought to me. Among these are examples from Kukuom, Mim, Goaso, Fwidiem, Nkussaim, Acherensua, and Bema. This is a wide distribution, and I have been told by the natives that they are found commonly throughout the forest. Those that were not

picked up on the surface were found farming or readmaking, i.e., at a depth of from 1 to 2 feet below the surface, which

until cleared is covered by "old" jungle.

Some forty specimens were collected, all except one being ground and polished in the usual neolithic style. The unground implement (Fig. 1) which was found at Wioso differs from the remainder of the collection not only in the character of its surface but in its comparatively large size, its greatest length being about 14.5 cm. and its maximum breadth about 5.5 cm. Although roughly worked and coarsely flaked, so that in general appearance it resembles



FIG. 1.—COARSELY-FLAKED IMPLEMENT WITH GROUND RDGE FROM ASHANTI.

the rougher specimens figured by M. Xavier Stainer from the Congo," its rounded cutting edge is perfectly distinct, and there is no doubt that this has been produced by grinding.

The other specimens, which have all been carefully finished, fall into two classes, viz., axe heads, and certain transverse-ended tools which above the sloped entting surfaces are oval or almost



FIG. 2 .- GROUND STONE IMPLEMENTS FROM ASHANTI.

circular in section. These so closely resemble "cold" chisels that I propose to speak of them by this name. The axe heads are of various types, all are rather small, some, including the largest, which is just over 8 cm. long, are almost rectangular

[&]quot; " U'Age de la Pierre au Congo," Annules du Masée du Congo, Torne I, Fasc. I (Brussels) 1899.

in form, others are oval with the edge at the broad end, while a few are unusually stout and thick. Not one of the chisels alluded to above is perfect, but the longest is a triffe over 8 cm. in length, and probably was never much longer; the two other specimens shown in the photograph are 7 cm. and 5.5 cm. respectively.

The example which is represented in the lower right-hand corner of the photograph (Fig. 2) is of special interest from the point of view of the use of these chisels, for although it differs somewhat in appearance, there is little doubt that it belongs to this class. In this specimen the oblique planes which form the enting edge have been continued the whole length of the stone, to a slight extent flattening its two opposite faces. Its first top presents that slightly roughened or "pecked" surface which is produced when a stone surface is struck repeatedly by another; in other words, this implement was held as we should hold a cold chisel or graving tool, and repeatedly struck by a hammer stone.

The natives call these stone implements nyamisoso and nyaminkuma (God's hors and God's axes), according to their shape. The reason for the names is the belief that the implements full from heaven, either with the lightning or "fulling stars." As a proof of this they say, "Was not a woman killed near Juaso by lightning? " and did we not find in the ground where she foll a nyamiakuma?" Further, the stones have medical virtue. Medicines ground with them have increased potency, they protect from lightning and "falling stars," and also give speed to the limbs. And as for the nyamisoso, with them God plants the bush yam and often leaves the hoe in the ground.

The specimens figured were found at Wicse, Boma, Nkassaim, Fwidiem, Goase, Mim, and Acherensua.

A. W. CARDINALL.

Navigation.

Hedley.

Transport of the Coco-nut Across the Pacific Ocean. By Charles Hedley.

The wanderings of an illiterate people, unaequainted with metals, leave few records decipherable in after centuries. Perhaps their route may be indicated by ornaments or utensils from a rifled grave. But if such a people were agriculturists while they kept to one climatic sone, the plants they introduced may still grow, the witnesses of otherwise forgotten journeys.

Such a history, one of daring exploration performed thousands of years ago, is now conveyed to us by the coco-nut palm. A fascinating story concurring it has been pieced together from botanical and historical sources and related by Mr. O. F. Cook.* After disproving and rejecting statements and conclusions generally current, he interprets the evidence afresh. He now shows that this plant originated in America, was there cultivated, transferred to visitors from the Pacitic Islands, and by them carried across to Asia. His writings do not seem to have attracted the attention that they deserve from ethnologists, though known to and appreciated by botanists, to whom they were in the first instance addressed. An outline of his views is now submitted for the consideration of another circle.

No botanist has yet found the coco-nut growing as a wild plant, thus its original home must be inferred from deductive reasoning. Examining the origin of cultivated plants, De Candolle found a problem in the case of the coco-nut which he could not satisfactorily solve. In Sanskrit literature the coco-nut is described as cultivated in Ceylon 2,000 years ago. To be precise, the date given by Tennent (Tennent, Ceylon, I, 1859, p. 436) is s.c. 161. On the assumption that Columbus, in 1492, was the

O. F. Cook—The Origin and Distribution of the Cocoa-Palm: Contributions from the U.S. National Herbarium, Vol. VII, No. 2, 1901, pp. 259-293. Id.—History of the Coco-aut Palm in America, op. cit. Vol. XV, Part 2, 1910, pp. 272-342.

first sailor to reach tropical America from the outside world, this early record of Asiatic culture appears incompatible with an American origin.

Yet all the other members—eleven species—of the genus Cocos are confined to tropical South America. Not only so, but all the botanical family to which this palm belongs, the Cocacea, embracing twenty genera and 200 species, are confined (with the doubtful exception of the African cil-palm) to South America. This to a biologist, trained in belief of evolution by descent with modification, is in itself convincing evidence that the coco-nut palm is also American. The earliest Spanish writers make frequent reference to coco-nuts cultivated at Port Rico, in Brazil, and Columbia. The trees they saw were tall enough to have been planted before the conquest. The large Indian nuts which Columbus observed in Cuba were probably coco-nuts. Not only the coco-nut, but other indigenous palms such as the peach palm, cabbage palm, and wine palm, were cultivated by the Indians.

Popular and postical illusions have misrepresented the spread of the coco-nut in the Pacific. Drifting nuts were believed to float from island to island and to grow without care where the waves fling them on the beach. But actually the coco-nut fails to establish itself on an open beach.* Where planted and then left alone, they are smothered by the surrounding native vegetation and perish. Even when established in number and reared to maturity they die out in depopulated areas. So thoroughly is the coco-nut demesticated that it is as dependent on man for its existence as any pet animal. Throughout the tropics of the Indian and Pacific Oceans the boundary between lands where the coco-nut did or did not grow was the boundary between the people who did and those who did not make gardens. For instance, the coast of tropical Australia was bare of these palms, though the opposite coast of New Guinea was fringed with them.

The sweet-potato was found by the first European explorers in the possession of every Polynesian people. This also was a native of South America, and must have been acquired in the same way as the coco-aut.

When the Polynesians first landed at Pauama or Gusquil, it was for them, as afterwards for the Europeans, a New World. Many were the novelties of fruit and flowers offered to them. From among such riches the visitors chose the coco-nuts as the best gift for a deep-sea sailor. These travellers appreciated their value as bottled drink and preserved provisions, hermetically sealed in handy vermin-proof packages. Henceforth the captain who carried a store of occo-nuts for a long sea voyage need not fear starvation.

Naturally they planted these precious nuts in their own islands for future use. And then from people to people the nuts passed along the main trade routes before the wind, till they reached the opposite continent. As the speed of a falling stone gathers more speed, so the uses of a useful plant may gather more uses as it goes abroad. For each people will hand the plant to their neighbours with the uses learnt from earlier owners, together with the uses invented by themselves. Thus the coco-nut first supplied food and drink. Subsequently its fibre was utilised, and not till half the Pacific had been traversed did it yield sugar and alcohol.

So the distribution of the coco-nut tells a tale of brown mariners who in skill and daring surpassed the feats of the Vikings; a tale of shipwrights who built ocean-going vessels without the aid of metal tools; of navigators who steered these ships across the open sea without sextant, chart, or compass; of adventurers who traversed the whole breadth of the Pacific more than a thousand years before Magellan.

CHARLES HEDLEY.

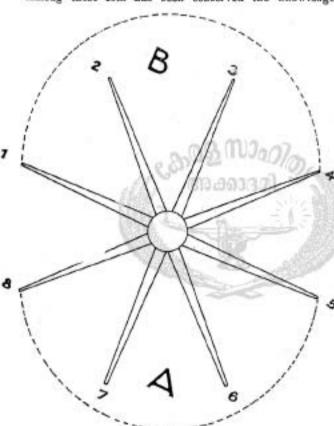
^{*} When I was in Murray Island, Torres Straits, in 1889, a native took me to see a coco-nut polm which had sprung from a nut that had been washed up on the beach, without having been definitely planted. He regarded it as a very great curiosity.—A. C. Haddon.

New Zealand. Best.

Notes on a Peculiar Game resembling Draughts played by the Maori Folk of New Zealand. By Elsdon Best.

On the east coast of the North Island of New Zealand lies the territory of the Ngati-Porou tribe, descendants of the eponymic ancastor, Porou-rangi. These natives have ever been among the most advanced of our aboriginal classes in regard to Maori industries, especially such as betokened artistic taste, as house building, wood carving, and textile manufactures. They are also included among the descendants of the Takitimu immigrants from Polynesia, who have preserved fuller accounts of tribal traditions and ancient ritual than any other division of the Maori people, so far as we know.

Among these folk has been conserved the knowledge of a game known as



of a game known as mu torere, formerly practised by them, and indeed played until recent times—until as late as the sixties of last century. Like nearly all the oki Macoi games, it has now fallen into disuctude.

The writer ohtained particulars of this game from the late Tuta Nihoniho, formerly nn. officer in the Ngati - Poron Native Contingent, but was somewhat sceptical as to its being a genuine old native game of pre-European times, that is to say, prior to the arrival of Europeaus on these shores. Since that time, however, inquiries have been made of an old man named Mohi Turei, a

member of Ngati-Porou, who died recently at about ninety years of age. Mobil maintained that it was an old-time Maori game, and quoted an old saying in proof thereof: E mu torere mai ana ranei koutou ki au, c hoa ma! "O friends! Are "you playing mu torere against me?" i.e., Are you striving against me? This proof does not seem to be very conclusive, but, as seen by the diagram, the board used is so different from that employed by us that one can searcely believe that the game was adapted from the introduced European game of draughts. We know that the latter was quite unknown here, and that, when introduced by early European visitors, it was eagerly borrowed by the Maori and quickly became known all over the country. The Maori called this new game mu, possibly after his own game, but many of us have thought that it was so named from the sound of our English word "move,"

so frequently ejaculated by draughts players. Against this theory may be mentioned the fact that a form of draughts played among the natives of the Hawaiian or Sandwich Islands, and said to be a pre-European usage, was known as ms, also as honane.

The following is a description of the game of mss torere, as played formerly:—
The diagram, marked on a piece of plank, or the smooth inner surface of a piece of bark, resembles an eight-rayed star. These rays are called kaussi (tentacles or arms), the open circular space from which they radiate is termed the putahi. Two persons play the game, each having four perspers or men, which are arranged on the outer extremities of the Kaussi or rays. Moves can be made only to the numbered points or to the central space (putahi), and no jumping of an occupied point is allowed; moves must be made to an adjacent unoccupied point or to the unoccupied centre. There is no taking or crowning of men, the game being a matter of blocking an opponent.

The following is a sample game:—B arranges his four men on points 1, 2, 3, 4. A arranges his on 5, 6, 7, 8. A opens the game, but cannot do so by moving 6 or 7, which are taps (prohibited) at this opening stage, in order to avoid a dead-lock. He can move 5 or 8 to the centre, and thus he moves 5 to that spot. B moves 4 to 5. A moves centre to 4. B moves 3 to centre. A moves 4 to 3. B moves centre to 4. A moves 3 to centre. B moves 2 to 3. A moves centre to 2. B moves 4 to centre. Now A finds himself pire or "out," and B has won, for A is blocked and unable to move, B having his men on 1, 8, 5, and centre, while A, occupying 2, 6, 7, and 8, is beamed in, and must capitulate.

The writer is not a draughts player, and has made no study of this game of we torere but is much interested in the question of its origin. Popular games are persistent and intrusive, hence if this is an old Maori game it should be known in all parts of this small land, whereas knowledge of it seems to be confined to a small part of the east coast, from about East Cape to Poverty Bay. If derived from or based on our game of draughts, why should the diagram or board have been altered by those who adapted it. Also we know that draughts was eagerly borrowed when introduced early in last century, and played as among us. It has occurred to the writer that a similar game to me torere may be practised by some nation other than English, and by some chance have been introduced here, at one place, at some recent time. Any information tending to throw light on this matter will be welcomed.

ELSDON BEST.

REVIEWS.

Central America: Archæology.

Joyce.

Central American and West Indian Archwology, being an Introduction to the Archwology of the States of Nicaragua, Costa Rica, Panama, and the West Indies. By T. A. Joyce, M.A. 263 pp. With many Illustrations and 2 Maps, 1916. Philip Lee Warner. 12s. 6d. net.

This recently issued and very welcome volume by Mr. T. A. Joyce is the third of a noteworthy triad. The previous volumes on Mexican Archaelogy and South American Archaelogy deal ably and clearly with the pre-Columbian history, arts, and customs of the Mexican and Mayan peoples on the one hand, and those of the South American peoples on the other hand.

The present volume completes the series by filling the hiatus between those two geographical areas, and serves as a link between them, both geographically and ethnologically. In the first portion the early culture of Central America is considered in detail, the area in question embracing Nicaragua, Costa Rica, and Panama. The second portion deals with the West Indian Islands. The general lines of the

earlier volumes are followed, and the uniformity, both in theme and treatment, is a valuable feature in this very useful series of handbooks. The difficult ethnological diagnosis of Central America is discreetly dealt with, cautiously yet on the whole convincingly; and the material and social culture of the several ethnic divisions are described in an efficient and interesting manner. The bringing together in readable form of the available material from this region will be warmly welcomed, since a general comparative study of the ethnology and archaeology of Control America has been greatly wanted. Mr. Joyce has diligently collected and systematically collated the evidence derivable from both literature and specimens, and he combles his readers to acquire a grasp of many of the problems involved which hitherto have remained obscure.

The area with which the book is concerned is essentially a linking one, and just as geographically it unites the northern and southern continents of the New World, so, too, ethnologically, it is an area of fusion, where the Mexican and Mayan cultures pushing southward met and were influenced by the northerly extension of South American culture. One of the chief objects of the book is to differentiate and evaluate the elements which suggest in the Central American culture-complex northern or southern affinities, and by a careful study of the effects of inter-tribal relationships, and of the influence of early commercial intercourse, the author has done much towards analysing the more or less hybrid cultures of the region.

Nicaragua and North-East Costa Rica are treated together, and evidence is offered pointing to cultural affinities with the north (whether these are in the unit due to Mexican or to Mayan influence is not yet clear), as exhibited by certain features observable in the stone-carving and pottery. It is noted that a Nahuati-speaking branch of the Nicarao even penetrated as far as and established itself in the region to the west of the Chiriqui Lagoon. On the other hand, it would appear that the gold-working industry and certain special practices were derived from Panama and the south.

In Central Costa Rica southern cultural affinities are strongly in evidence, as might be expected in an area where a southern linguistic stock prevailed. In the Guetar region, which, archeologically, is relatively well-known, there are signs that Chorotegan ideas met and medified the Chiriquian (Talamancan), the evidence helping towards establishing a culture-link between Nicaragua and Panama.

Southern Costa Rica and Panama are associated together, partly on linguistic grounds and partly on account of their general culture being of distinctly South American (mainly Columbian) type, though even here some of the effects of culture-contact with the north may be noted.

The whole Central American region presents great complications, and Mr. Joyce has done yeoman service in his endeavour to disentangle the confused elements. He has dealt with the various arts and customs individually with much critical discornment, but, as he readily admits, our knowledge of the region is scanty, and the spade will have to be busy for a long while are it will be possible to arrive at any final conclusions.

The problem in the West Indies is a simpler one. Here we are concerned with almost pure South American culture elements, transmitted to the islands by two main waves of immigration. The earlier Arawak (Tainan) immigrants peopled the whole of the group, including the Bahamas, and they were largely overrun by a later invasion of Caribs, who occupied the Lesser Antilles and partly exterminated, partly absorbed, the Arawakan population of the south-eastern group of islands. The Tainan were able to maintain themselves in the Greater Antilles and in the Bahamas, whither the Caribs were unable effectively to penetrate.

The evidence in the West Indies of culture-contact with Central American

civilisations is exceedingly scanty, a fact which is remarkable in view of the proximity of Western Cuba to Yucatan. One looks almost in vain, too, for signs of North American influence having reached the Bahamas and the Greater Antilles vià Florida, and it would appear that, as a whole, West Indian early culture, while exhibiting traces of South American origin, must have developed and become specialised to a remarkable degree indigenously. Still, archeeological research in the islands has been so far too limited to warrant any conclusive views, and further investigation is greatly needed.

Mr. Joyce makes numerous interesting suggestions as to the evolution of decorative designs, and as to the derivation of poculiar forms. The diagnosis which he gives of the celebrated "stone collars" of the Antilles, referring them to a wooden prototype, is extremely plausible. Pottery is discussed at considerable length, and is much used as evidence of cultural affinities. Occasionally, slight ambiguities occur in the descriptions, as, for instance, in his account of the "lost colour" ware of Chiriqui, in which he describes how the design on the vessels was first traced in wax, and the whole pot was then covered with black pigment and subsequently boiled. He adds: "By this process the black is removed from the waxed portions, " and the design appears reserved in the ground-colour." Now, since the whole point of this stopping-out process is to prevent the pigment from reaching the portions which are coated with wax, it is somewhat misleading to speak of the black having been removed from areas which it has not been allowed to reach. Such slips are, however, rare, and the book is well-written and very readable. The points discussed are judicially argued with cautious reserve. Mr. Joyce does not discuss the possibility of exotic influence upon the culture of the region from far-distant sources, and, perhaps advisedly, he makes no reference to the Phoenicians and their

The illustrations in the book are numerous and excellent. Incidentally they bear testimony to the richness of the Central American and West Indian sections of the British Museum. The index is less satisfying, and does scant justice to so useful a book of reference; very many important details are omitted from it. A bibliography is added in an appendix. The author is to be congratulated upon the way in which he has achieved the difficult and useful task upon which he embarked, and his latest volume may be recommended as strongly as the previous ones.

HENRY BALFOUR.

Ashanti. Rattray.

Ashanti Proverbs: The Primitive Ethics of a Savage People. Translated from the original, with grammatical and anthropological notes. By R. Sutherland Rattray, F.R.G.S., F.R.A.I. With a Preface by Sir Hugh Clifford, K.C.M.G.

The Ashanti of the Gold Coast hinterland are obviously a people with a past. Linguistically, they only form one of the members of the widespread Agui language family, which extends from the eastern Gold Coast and the neighbourhood of the Volta River westwards across half the French Ivory Coast. This language-family—especially as evidenced by the Twi or Ashanti tongue, has a very decided Beattu flavour about it—semi-Bantu, at any rate—and would seem, from the scanty information we possess, to be connected with the language—or one of the languages—of the Barba in the country of Borgu, on or close to the River Niger. To make this derivation absolutely certain we require more linguistic information than we at present possess concerning the special interesting languages along the course of the Niger above the Benue confluence. Our only vocabulary of Barba, so far as I am aware, is the one recorded by Koelle in his Polyglotta Africana. But seeing the remarkable accuracy with which Koelle transcribed all his other vocabularies which

have been put to the test by modern information, there is no reason to suppose that he erred either in the form which he gave to Barba or in its geographical locality. This being the case, we are able further to connect the Ashanti people (more, perhaps, than the rest of the Agni group) with the semi-Bantu languages of the Kaduna Basin, east of the main Niger. These again are obviously related (to speak now of information not yet published) to the semi-Bautu of the Bauchi highlands and the central Benne basin. It would therefore seem probable that the ancestors of the Ashanti came from the Niger basin and pursued a west-southwesterly course. They differ in so many respects from the more typically negro const. tribes of the Gold Coast and Ivory Coast that the language connection between them may be due to the imposition on these folk of Ashanti or Agui dialects, and the more ancient and preceding language type of the Gold Coast littoral may probably be the Ga family, still spoken in the Akra district. It is probable. therefore, that in the folk-lore wisdom and semi-civilisation of the Ashanti we have some of that comparatively ancient Nigerian influence which has spread so widely over forested Negro Africa, the Nigerian influence itself being, of course, derived still more anciently from either Egypt or North Africa in successive waves of penetration by Mediterranean men and Mediterranean ideas. Nothing whatever in the book under review lends any further colour to the less acceptable theory that the arts and erafts and semi-civilisation of the Gold Coast (which decidedly existed prior to the arrival of the Portuguese) owed their origin to any Carthaginian influence coming by sea around the west coast of Africa. If there was any Carthaginian intercourse with the gold-bearing regions of the inner Gold Coast, it was simply a part of that comparatively ancient Trans-Saharan intercourse which no doubt has subsisted in an intermittent fashion from Neolithic times onwards.

Mr. Rattray's book, though it only runs to just under two hundred pages, is an important African document. It really contains an epitome of the mental shrowdness, the wisdom-learnt-by-experience, of the semi-civilised negro. Each proverb is given a literal and literary translation into English, and then commented on from the philological and ethnological points of view. In this way we get a great deal of accurate information regarding the religious ideas, the classificatory system of relationships, the implements, ancient and modern, the totems, the ideas about animals. the morals, and the physical traits of the Ashanti. This book is at the opposite pole of the somewhat amateurish character of most "standard" works on the Gold Coast peoples. The author himself gives a rather good definition of the slipshod writing which too often passes current, especially with the average raviewer, for truth and wisdom regarding African studies. Referring to the writings of the late Major Ellis, who at one time was Governor of the Gold Conat (and who, nevertheless, must be credited with having done that region much service with his pon), he says: "The first credentials the present writer would ask of anyone who was " advancing an opinion, as the result of independent research into native customs " and beliefs would be the state of preficiency that the investigator had " acquired in the language of the people whose religious and beliefs he was " attempting to reveal . . . the standard he would ask would be a high one. " Had the investigator real colloquial knowledge of the language of the people whose " inner soul he was sudeavouring to lay bare? Such a knowledge as is gained only " after years of arduous study and close intercourse, a knowledge which would "enable the possessor to exchange jokes and quips and current slang and join in a " discourse in which some dozen voices are all yelling at once. Such a knowledge " of a language is a very different thing from an academic acquaintance with it " which might fit the possessor to write an excellent grammar. . . . Judged by " such a standard the late Major Ellis must have been found wanting." And

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judged by such a standard, without any consideration as to whether they may or may not have had in politics pro-German proclivities, Mr. Rattray rightly exalts for our admiration the late Rev. J. G. Christaller and others of his colleagues amongst the Basel missionaries in the Gold Coast territories. This contention arises in connection with the original idea of the Supreme God (Onyame). Major Ellis contended, against the opinion of the Basel missionaries, that this was an idea derived from the outside world—Christian or Muhammadan. Mr. Rattray takes the opposite view, and his reviewer agrees with him, though not in the derivation of the word. It is very probable, owing to interlinking forms (Nyambe, &c.) that the Onyamo of the Ashanti came with them from the semi-Bantu regions of Eastern Nigeria, whence likewise it travelled in other directions right into the heart of Bantu Africa. The conception of a Supreme or Sky God in negro minds, at any rate in those that speak Bantu languages, must go back into very remote antiquity, and begins with the conception of an Old Man in the Sky whose voice is the thunder, whose weapon is the lightning, and whose benefaction is the rain.

It augurs well for our colonial service in Africa that it should number increasingly amongst its members trained anthropologists like Mr. Rattray, Mr. Commissioner Hobley, Captain Orde-Browne, Captain Stigand, Mr. Amaury Talbot, and many others whose works are from time to time reviewed by the Royal Anthropological Institute. H. H. JOHNSTON.

Anthropology.

Scott Elliot.

Prehistoric Man and his Story: a Sketch of the History of Mankind from the Earliest Times. By G. F. Scott Elliot, M.A., B.Sc. London: Seeley, Service and Co., Ltd. 1915. 7s. 6d. net.

There are some books—and this is one of them—which tempt the reviewer to shirk his responsibilities by bestowing the damnation of faint praise. The author has been betrayed by his own industry, and has produced a book which will make extraordinary demands on the "ordinary educated reader" for whom he writes. He admits that "no one, however omniverous his reading, could possibly learn and "digest all the available literature" of the problems bearing upon the science of anthropology. Unfortunately, he has made a brave attempt, and the reader becomes an accomplice in the process of digestion. Far too much detail is given, and the author's attempt "to keep the main outline clear and consecutive" must be judged to have broken down—perhaps partly because he has endeavoured "to avoid repeating "what has already been given in full detail in books of the same nature."

In his style Prof. Elliot shows himself to be experienced in the art of popularisation, but one is disposed to be sceptical as to the value of some of his more picturesque imaginings-such, for example, as the word-film depicting the histrionic behaviour of Pithecanthropus (2) when menaced by a hungry carnivore in the wilds of Pliocene Java; or the peep into the nest containing the "Titian red or bronze babies" of our Plicence precursor. At times, also, there is a filmsiness about his speculations which detracts from their interest: "One naturally wonders if a sort " of genealogical lemur-monkey-man could have lived on the Rocene coast-line," Some sort of an ancestor there no doubt was, since we are here. Homosimius precurzor, for the Oligocene and Miocene ancestor, does not commit us to much, and he may have made the "coliths" of those periods, or he may not. The author fails to seize the opportunity of giving to Pliocene man the desirable name of Homosimius rostro-carinatus, which appears to be still at large. We may note incidentally that the "eoliths" are accepted en bloc-though only as a working hypothesis-with the support of at least one argument of engaging simplicity: "Surely, also, if there is " little to prove that coliths were made by man, there is even less to convince us

" that they were formed in any other way." Mr. Elliot has his moments of acepticism, however: "Moreover, there were neither cartwheels nor cement mills in the Miocene."

The early history of man offers such unrivalled opportunities for the exercise of the uncritical faculty that authorities, as well as facts, require some selection. The author has not always been fortunate in his choice, although he has "preferred " foreign authorities, as being less accessible to the general reader." There are, however, errors and misconceptions for which the authorities cannot be held responsible. The incorrect statement is made (p. 104) that the split stick and ratten "fibre" (for fire-making) of the Tapiro is very similar to the ploughing method. The Zulus are referred to (p. 239) as of "pure negro race." Cephalic indices are given on p. 144 as so much per cest. Pliocene man may have had extremely large teeth, " often with five roots to them," but one would like to know how often and which, Amongst implements of "colithic" character found with the Piltlown skull (p. 126) "one is a very early type of borer which may have been used to prepare spears, to " skin animals, or to split marrow-bones." Eoliths are notoriously versatile, and it matters little what the types are called, but afrely an colithic borer should be credited with at least the desire to bore. The author has failed to keep page with the increasing (official) cranial capacity of Piltalown man, which he gives as 1,070 ec. (p. 128), though he quotes 1,500 cc., in a note, as Prof. Keith's estimate. He also attributes the restoration of the lower jaw to Dr. Elliot Smith.

There is no lack of confidence in Mr. Elliot's solutions of some of the problems of anthropology. Thus (p. 338), ". . . the modern European is, on the view " which we have adopted here, just a mixture in varying proportions of the three " types-Cromagnon, Furfooz (with later brachycephalic introductions), and Moditor-" ranean." Very drastic is the following (p. 389): "In such a community as the " Arunta anything would soon become involved in a mass of mystical awe-inspiring " nonsense." There is a suggestion of frightfulness about this solution which may perhaps be due to one of Mr. Elliot's German authorities.

In spite of the defects of the book, it embodies the result of much literary research, and contains a great accumulation of facts, presented in an interesting manner. There are few men who could deal with so many subjects with complete success, and if the author has not written the book he projected, he has failed through excess, and not through want of enterprise.

The scheme of illustration cannot be commended,

H. S. H.

Africa: Linguistics.

Werner.

The Language-Families of Africa. By A. Werner. Society for Promoting Christian Knowledge, London: 1915,

In this small book of 150 pages Miss Werner has given a valuable and instructive account of the present position of African linguistic problems. A brief historical sketch of the progress of knowledge and of early attempts at classification, with a description of the main features of isolating, agglutinating, and inflectional languages serve as introduction to the author's classification of the African languages. divisions are recognised: (1) The Sudan family, isolating; (2) The Banta family, agglutinating; (3) the Hamitic family, inflectional; (4) the Bushman group, doubtful at present; (5) the Semitic family, inflectional. In the general discussion of these which follows, the principal characteristics of each division are set forth, and an account is given of African sounds.

Here a strong plea is put forward for the adoption of the script of the International Phonetic Association. A table is given of the alphabet, and the author suggests that this should be used by missionary societies and collectors of African

languages in place of the Standard Alphabet of Lepsins, as remodelled by Meinhof, and generally used by German missionaries and students everywhere. Of Meinhof's system she says: "It is, perhaps, open to some objections which I need not discuss "here; the greatest of all is the impossibility of making it universal in this country, "and, that being so, the effort to introduce it at all seems little better than a waste "of labour." Miss Werner has here lost sight of the fact that owing to the enormous amount of linguistic literature of German authorship it seems almost equally impossible to substitute the International system for the German. In England linguistics can hardly be said to be an organised study, and there is, comparatively speaking, very little research work carried on. Those English writers who have dealt most fully with African languages—Bleek, Steere, Ellis, Johnston, Thomse—each use a different script, whilst the writing of sounds by the Germans—Meinhof, Westermann, Struck—is fairly uniform.

A chapter is devoted to each of the five divisions of African languages. Miss Werner's examples of languages belonging to the Sudanian family (Sudania?) are mainly those set forth in Westermanu's Sudanspracken, i.e., the Ewe, Tshi, Ga, Yoruba, and Efik of the west, and the Kunama, Nuha, and Dinka of the east. The remaining languages of Negroland, which he includes by inference in the Sudan family, such as the Wolof, Mande, Bulom, Temas, Songhai, Munshi, and Jukum, are dismissed in a couple of paragraphs, though their differences from the type illustrated in Westermann's book, a difference which he himself recognised, merit a somewhat fuller account.

In the chapter on the Bantu family Miss Werner has less exclusively followed one author, and has given a very good outline of the main features of Bantu grammar.

Meinhof has been accepted as the guide to the Hamitic languages, and the Masai, Hausa, and Nama are included with them. In a chapter on "The Key to the Bantu Languages" the Ful language is somewhat fully discussed in its relation to others, the writer apparently agreeing with Meinhof as to it being a possible link between the Hamitic and Bantu.

The Bushman languages are the subject of an interesting historical and descriptive chapter. The Semitic languages are very briefly described.

The book has an introductory note by the Reader in Phonetics in London University on the importance of phonetics in teaching African languages. It is convenient in size and well printed, and contains a map and short bibliography. It will certainly prove of much service to those commencing the study of any African language.

SIDNEY H. RAY.

Ethnology. Howley.

The Beathuks or Red Indians, the Aboriginal Inhabitants of Newfoundland. By James P. Howley, F.G.S. Cambridge: University Press. 1915.

The Beothuks, as is well known to all Anthropologists, are, like the Tasmanians, an extinct people, and, again like them, have caused no end of discussion concerning their position in the ethnology of their respective regions. It is, therefore, with no little pleasure that we take up a new book of almost 350 pages on them. However, this book does not contain that much new material, for it is partly made up of reprints of well-known papers on the Beothuks, partly of reprinted inaccessible, or nearly inaccessible, papers, and partly of manuscripts hitherto unpublished, and partly of original investigations. Mr. Howley says: "For the past forty years I have "endeavoured to gather from every available source all possible information bearing upon this subject," and this describes the book in a nutshell. Mr. Howley does not divide his subject into History, Archeology, Ethnology, or any similar grouping,

but into centuries. This division, which on first thought would seem to be unsatisfactory, succeeds very well for the earlier centuries, but not so well for the later ones, for the nineteenth century occupies more than three-quarters of the book, and the eighteenth takes up more space than all the preceding centuries. By far the most important of the earlier documents which he prints is one by Lieutenant John Cartwright, afterwards Major. This contains some excellent ethnological material not before necessible. It is to be regretted that Mr. Howley does not state where be got this account of Cartwright's, but I presume that it is an unpublished manuscript. The account given by Lieutenant Buchan of his trip to the Beothuk country also contains some fairly good material. This too, I presume, hitherto existed only in manuscript. The book also contains a reprint of "Cormack's Journey Across Newfoundland," which was quite care but very important. I am sure we are all glad this is now made readily accessible.

Of little value, however, from an ethnological point of view are the many letters and minute accounts of the transactions of the various societies, but, on the other band, a short account of the "Life and Culture of the Beothuks," by Cormack, which had previously only existed in manuscript, is of the utmost importance.

Mr. Howley's original contributions consist of some rather interesting traditions about the Beothuks, which throw, however, no new light on their ethnology, and the reports of some archeological finds which are quite interesting, and were apparently carefully made and reported. Mr. Howley's discussion of the origin, language, and physical anthropology of the Beothuks, sheds no new light on those topics.

Two of the most valuable things in the book are the reproduction of Shanarodith's drawings and twenty-seven excellent plates of the implements, archaeological find, and reproductions of illustrations from earlier books.

In conclusion, although the book does not give us much new information on the Beothuks, which indeed would be impossible at this late date, nevertheless it gives us some unpublished material and makes accessible the already published material.

I am sure Mr. Howley deserves a great deal of credit for his long labours in collecting all the available material, and giving it in very convenient form to the public. From now on we may consider, as far as descriptive material goes, that the work on the Beothuks is complete. The interpretation and comparison of this material remains for the future ethnologist, when the work on the surrounding tribes will have been completed.

WILLIAM H. MECHLING.

India: Anthropology.

Russell.

Tribes and Castes of the Central Provinces. By R. V. Russell, I.C.S. 13 (assisted by R. B. Hirā Lāl). 4 Vols. Macmillan and Co. 1916.

The appearance of these volumes was accompanied by the announcement of the death of Mr. R. V. Russell, who was lost in the P. and O. liner, "Persia," torpedeed in the Mediterranean in the early part of this year. Mr. Russell was one of the latest and most successful students of the races of India, and his loss is greatly to be deplored. It was due to the adoption by a nation, still claiming to be civilized, of a barbarous system of attacks on peaceful passenger ships.

Mr. Russell was on his way back to India from England, where he had been on sick leave for some time. During this period he prepared and saw through the press the volumes now under consideration, which have been published for the Government of the Central Provinces of India.

The first volume may be called introductory in the broadest sense of the term, containing, as it does, a comprehensive essay on Caste which extends over 197 pages, and a series of articles (alphabetically arranged) on the Religious and Sects of the

Central Provinces, the greater part of which is of value for the whole of India, and not only for those provinces.

The main Glossary of Tribes and Castes occupies Vols. II, III, and IV of the work, and there is also an additional Glossary of minor titles (with references to the main articles) at the end of Vol. I. It will be seen, therefore, that the whole subject is dealt with comprehensively and systematically.

Perhaps the most important part of Mr. Russell's work relates to the most primitive races still found in India. The Central Provinces offer poculiar advantages for the study of such races, for here is found the principal collection of the least contaminated tribes of the Munda or Kolarian family, including the Kola themselves, the Santāls, and many others, and also the principal Dravidian tribes, the Gonds, Khouds, and Orāous. The Bhils may also perhaps be classed with the Kolarian tribes, although they have lost their original language. The bulk of this tribe is found outside the limits of the Central Provinces, but those of the Nimār District are sufficiently numerous to be described in a very full article. Totemism is still prevalent among them, even among those professing Islām.

The Gouds are more representative of the Central Provinces, and their influence was so widespread that this region was formerly known as Gondwans. They are described here in a very full article of over a hundred pages in Vol. III, which practically sums up all that is known on the subject. Under the article "Kol" the whole origin of the Kolarian race is discussed. The articles on Khonds and Ordons, among others on primitive tribes, may also be mentioned as important. The portion of Vol. I devoted to articles on religion and sects has already been alluded to. In this will be found full details on Hinduism and its principal Saiva and Vaishnava sects, and the sects and religious founded by reformers from the earliest to the latest times, from Jainism to the Arya Samāj. The Satuāmi sect is confined to the Central Provinces and is practically found only among the Chamārs of Chhattisgarh, and is in essence, according to Mr. Russell, a social revolt against the degradation imposed on the Chamārs or leather-dressers by arthodox Hinduism. The whole of this section deserves careful study.

Anthropologists must lament the loss in Mr. Russell of an Indian civillan who was carrying on with great success the line of investigation with which the names of Mr. Nesfield, Sir Denzil Ibbetson, and Sir Herbert Risley have been worthily associated. India is fortunately not without other enquirers who are able to carry on anthropological, linguistic, archeological, and historical studies without prejudicing their efficiency as Government officers. Such officers are generally those who have been most intimately in contact with the people, and their value in a sympathetic administration of India needs no comment.

These volumes have been brought out in excellent style by Mesers. Macmillan for the Government of the Central Provinces, which has set an excellent example to other administrations in India. It is perhaps permissible to suggest to the Governments of Bengal and the United Provinces that the glossaries of Sir H. Risley and Mr. Crooke should be re-issued in some such form as this, and at the same time revised and illustrated. The anthropometrical figures might be reserved for a separate volume dealing with the whole of India, which would not require such an expensive method of production.

M. LONGWORTH DAMES.

Turkey: Islam.

Sykes.

The Caliph's Last Heritage: A Short History of the Turkish Empire.

By Lieut.-Col. Sir Mark Sykes, Bart., M.P. London: Macmillan & Co. 1915.

This is a very timely and valuable book. It falls into two parts. First, a graphic history of the rise and progress of Islam and of the Turkish Empire;

secondly, diaries of exploration in that part of Asia Minor which is now the scene of war. The first part contains little that is novel, but the account of the local geographical features as influencing history is of much interest, and this section provides one of the best available summaries of Turkish history. The second supplies a remarkable description of the races and physical features of a land on which our attention is now fixed. From Mosul as centre he made a series of journeys, including places like Erzerum, Bitlis, Mush, Lake Van, and through Bagdad along the Persian frontier. The account of the Kurds, to whose tribal organisation a valuable appendix is devoted, contains much useful information based on personal experi-"The Kurdish woman," he tells us, "bas enuncipated berself, and although " she lives apart from the men, is as free to ride abroad, take her leisure, or bully " her husband as any Englishwoman. And with this emancipation comes a far " stricter and higher moral code than elsewhere." In Diarbekir the Kurds "appear " to be idle, thievish, and cowardly; indeed, I imagine that the ill name assigned " to the whole Kurdish mee comes from the fact that these particularly unpleasant " people are the only Kurds whom the unijority of travellers meet." "I always " understood that the Yezidis were a much maligued people, grouning under a cruel " oppression, and so on; brave, conrecous, industrious, with an ingrained love of " freedom, and possessed of all the rest of the Balkan-mongers' stock-in-trade virtues. " My experience, however, does not encourage me to put much faith in the theory." " The Armenian national revival was a calamity which has not yet reached its " catastrophe. Mollahs and missionaries should be put under lock and key before " any serious business is undertaken. . . Never was a people so fully prepared " for the hand of a tyrant; never was a people so easy to be preyed upon by " revolutionary societies; never was a people so difficult to lead or to reform." It remains to see how they will bear the yoke of Russia. 'The picture he draws of Turkish mal-administration fully accounts for the present situation. Enough has been said to show that this work will correct many current misapprehensions, and the facts which he has collected will be of the highest value when the settlement of this phase of the Eastern question comes to be undertaken. W. CROOKE.

ANTHROPOLOGICAL NOTE.

ACCESSIONS TO THE LUBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

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(Donor indicated in purentheses.)

The Development of British Building Construction. By C. F. Innocent, 9\(^3\) \times 6\(^1\). 284 pp. Many Illustrations. Cambridge University Press, 1916. 10s. 6d. net. (Publishers.)

An Elementary Geneman of the Ibo Language. By The Reverend J. Spencer, 3rd Edition, revised by T. J. Dennis, M.A. $7\frac{1}{2} \times 5$, 116 pp. Society for Promoting Christian Knowlege. 1916, 10d. (Publishers.)

A History of Sumer and Akhad. By L. W. King, Litt.D.F.S.A. 363 pp. With Map, Plans, and Illustrations. Chatto and Windus. 18s. net. (Publishers.)

In Far North-East Siberia. By I. W. Shklovsky ("Dioneo"). Translated by L. Edwards and Z. Shklovsky. 9 × 6. 250 pp. Map and Illustrations. Macmillan & Co., Ltd. 8s. 6d. net. (Publishers.)

The Drama of Savage Peoples. By Loomis Havemeyer, Ph.D. 8\(\frac{1}{4} \times 5\(\frac{1}{4}\).

261-pp. Humphrey Milford. 7s. 6d. (Publisher.)

Myths and Legends of Babylonia and Assyria. By Lewis Spence, S₂ × 6, 380 pp. 8 Plates in Colour by Evelyn Paul and 32 other Illustrations. Geo. Harrap & Co. 8s. 6d. (Publishers.)



EDWARD BURNETT TYLOR.

ORIGINAL ARTICLES.

Obituary. With Plate B.

Read.

Sir Edward Burnett Tylor, D.C.L., LL.D., F.R.S. Born October 2nd, 1832, died January 2nd, 1917. By Sir C. Hercules Read, F.B.A.

The death of Sir Edward Burnett Tylor has deprived the scientific world of a distinguished and rare personality, and the inspiration of his presence will long be missed in the special field that he had made his own. The loss is the more serious inasmuch as new blood is by no means too plentiful in the ranks of the younger men of science, an unfortunate condition at the very moment when the state of the British people, due to the war, will speedily demand just the qualities and experience to be found in the well-equipped anthropologist. In many ways Tylor's career was characteristic of English methods, if one can so call the chain of accidents that finally culminated in providing Oxford, somewhat to her surprise, with a Chair and a Professor of Anthropology. He began life as an apprentice in the family firm concerned with a branch of engineering, but while still a boy his health showed signs of delicacy, and travel became a necessity. He thus found himself in the year 1856 in Cuba, having spent a year in the southern States. In Havana he met with "Mr. Christy," and they arranged to travel together in Mexico. From this trip resulted the very entertaining volume, entitled Anahume, published in 1861.

Modern readers would hardly know that this Mr. Christy was Henry Christy, the famous explorer, with Edouard Lartet, of the caverns of Dordogne, and the person who brought together the immense ethnographical collections now forming the greater part of those in the British Maseum. Two men of such similar tastes could scarcely fail to be in sympathy, and on their journey Tylor gathered facts and laid the foundations for his future books, while Christy collected antiquities and the productions of the modern Maxicans to enrich his growing collections. Analysis was followed in 1865 by Researches into the Early History of Mankind and the Development of Civilization. Here began the true anthropologist, and until one comes to deal with its successor, Primitive Culture, published in 1871, the reader would be surprised at the amount of keen observation and intelligent criticism of ethnological facts to be found in it.

When this last-named book is studied the reader quickly sees to what astonishing lengths Tylor's insight had carried him, during these years, towards the understanding and clear co-ordination of the beliefs and practices of primitive man. Though not the first man in Europe to deal with these problems, he certainly was the first to set them out in an intelligible and businesslike way. Anyone who has studied the writings of Professor Bastian, of Berlin, and will compare them with those of Tylor, will readily agree in this. The width of his reading, observation, and knowledge joined to this agreeable clearness in his written exposition made him easily the first of European anthropologists, apart from the physical aspect of mankind.

As a lecturer he was by no means so successful, it may be from the very richness of knowledge; the retirement of his study was the best incitement to precise expression. But his masterpiece of terse statement was undoubtedly the little manual on anthropology, first printed in 1881, but re-issued to meet the public demand at intervals in the following decade. It is a monument of the compression of a gigantic subject into the smallest conceivable compass, and in this sense is the result of all his previous more expansive writings. Without the concentrated though and lengthened experience obtained in much more voluminous productions, it may fairly be said that the smaller volume would have been an impossible achievement.

It is here, too, that he puts forward a justification for the study of anthropology that deserves to be borne in mind by all of us who have become involved in its mazes. The very word is notoriously repellent to the lay mind, and I well remember Sir Michael Foster saying to me when I was President of Section H., at Dover, "The worst of you is that you include nearly everything." It is true enough in a sense, but Tylor's claim is that it simplifies the acquisition and understanding of knowledge, by showing the student the simple fundamentals of all human practices, and thus enabling him to disentangle the mystifying growths that subsequent ages have encouraged, and to see the primitive germ clearly before his eyes. A science (and anthropology has at last painfully become a science) that can do this deserves the gratitude of every student of human activities.

During practically all the period of its growth from a derided byway to truth, when men were groping somewhat blindly without knowing where they were being led, up to the present time, when its help and its decisions are invited by Governments, Tylor was in the forefront and kept a high standard before him and his contemporaries and his grateful disciples.

My first acquaintance with him was about the year 1874, when my duties and responsibilities were limited to the Christy Collection, then in Victoria Street, Westminster, and here Tylor was not only a frequent visitor, but was also the means of adding to the collections. From that time to the end of his life our relations have been uniformly friendly and punctuated by the services, small or greater, that our respective positions enabled us to render each other.

'The learned world was fully alive to Tylor's merit, and Oxford bestowed upon him the honorary degree of D.C.L., and he was made an honorary Fellow of Balliol, while Cambridge conferred her D.Sc. at a later date. In my opinion, the event that gave him the greatest pleasure was his Oxford appointments, first Keeper of the University Museum, then Reader in Anthropology, and, finally, its first professor. hoped that Oxford will not allow him to be also the last. As Gifford lecturer he had a subject very much to his taste in the delivery of two series of lectures on natural religion. As President of the Institute he brought to bear upon our proceedings the accumulated experience and knowledge of an active life devoted to studies such as ours, while his distinguished presence and gentle manner made our meetings under his auspices both dignified and agreeable. It was a pleasant duty to his friends and fellow workers to hand together to produce the volume of essays dedicated to him on his seventy-fifth birthday; these will remain as a monument of the affection that bound them to him when other schools of authropologists will have arisen and will build on the foundations he has laid. C. H. READ.

Japan: Folklore.

Some Japanese Charms connected with the Making of 17 Clothing. By W. L. Hildburgh.

"Some ladies never cut out material for a costume without uttering a set formula of invocation, or placing three plaches of rice on the shoulder gusset, and nearly all eschew the 'monkey' days of the calendar and choose the 'bird' days for such operations, the belief being that burns and rents will result if the former pressution be neglected, and that in the latter case the garment will be as durable as the plumage of a bird," After the pieces of a garment have been cut out, they are laid together so as to form a small pile, the messuring-stick which has been employed is placed upon the top of them, and a little dried bonito is placed beside the pile as an offering to, I have been told, the measuring-stick, as embodying a divinity who is a patron of tailoring [Chikuzen province†].

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^{*} F. Brinkley, Japan and China, Vol. V, p. 236.

[†] Place-names given thus identify the localities in which I recorded the respective beliefs or practices cited, or those where they had been observed by my Japanese informants.

The measuring-stick, which is regarded by women as having something of a sacred character, must be treated with respect, lest it cause trouble to the person who acts in a disrespectful manner towards it. Thus, for example, it must not be stepped over, because stepping over a thing is considered to be insulting to that thing (as it would be to a person), and sometimes to have very injurious effects upon it; and it may not be placed on any person's head without danger to him-it is thought that if it be placed upon a child's head the child's growth may be interfered with, perhaps, my informant suggested, due to a belief that the spirit of the measuring-stick may become augry, perhaps, I think, because of a belief connected with the idea of the injury (also cited by various informants in each case as the stoppage of growth) which may be caused by the placing upon the head of various objects having intrinsic psychical powers or by the stepping over of a child [Chikuzeu]. On one day of the year the measuring-stick and the needles are allowed to rest, and offerings of food are made to them [Chikuzen].

"Industrious women still make offerings of broken needles at the temple of " Awashima on the 8th of the [12th] month, and still abstain from all sewing on " that day," "The superstitious Japanese housewife still, on the 12th day of the " 2nd month, gives her needles a holiday, laying them down on their side and " making them little offerings of cakes, &c." If a woman, while sewing, puts her needle into her hair and then goes out, forgetting to remove it, some piece of ill-luck will befall her! - a belief which may be related to one of those noted above with respect to the placing of the measuring-stick on a person's head, for needless are employed (often specifically, and not merely because they are one kind of pointed objects) in various curative or injurious majinai, seemingly as objects productive of an irritant action by which supernatural beings may be correed. If a needle sticks in the flesh one should, to avoid poisoning thereby, strike the wound several times with the handle of one's seissors, saying " Togameru na" (togameru = to censure, to blame), a formula explained to me as being the equivalent of "Do not become irritated" [Yokohama]. (The striking with the scissors, a weapon-like article of which spiritual beings would be afmid, suggests that the formula is really addressed to some supernatural being, or possibly to the needle; thus, the intention of the formula would seem to be the expression of " Don't cause irritation; I'm not blaming you.") It is believed that a needle which has penetrated the foot will move upward through the body until it reaches the head. If one thread a needle by the light of the moon, the eyes are thereby strengthened.

In order to find a needle which has fallen, one should recite first one half of a certain verse and then should stroke the kimono three times, beginning at the crotch and stroking upward over the stomach; after the needle has been discovered, the remaining half of the verse should be recited [Yokohama].

If, when one is sewing, one's thread becomes entangled, one should recite three times in succession a certain verse (of the nature of one of our "tongue-twistors") which is spoken correctly only with difficulty; if this recitation be performed properly, the threads may be disentangled with ease [Yokohama]. I think that, behind its very obvious symbolic conception, this majinai has a sound basis; the fixation of the attention required in order that the verse may be spoken properly is

Brinkley, Japan and China, Vol. VI, p. 123.

[†] W. G. Aston, Sleinfo, p. 73.

H. ten Kate, "Aus dem japanischen Volksglauben," in Globus, Vol. XC, p. 114.
 P. Bhusan, "Volksthümliche Vorstellungen in Japan," in the Mittheilungen der deutschen Gezellschaft für Natur- und Völkerkunde Ostasiens, Vol. VI., p. 887.

Ibid., p. 334. Khman, who gives rationalistic explanations of a number of the Japanese beliefs and customs recorded by him, says that this belief is based on the idea that when there is moonlight one should use it to work by, and thus be sparing of artificial light.

likely to cause the attempt at the disentangling to be made carefully and without baste.

If an insect erawls through the leather ring used by the Japanese for the purposes of a thimble, a swelling will occur on the finger upon which the ring is worn.*

The following beliefs about clothing are worth noting here: "After 5 p.m. "many people will not put on new clothes or sandals." A plentiful supply of clothing and the securing of good-fortune in general is thought to be assured by the placing of a cowry-shell (hoyasugai) with the laid-away clothing, because, according to my informant, of the hoyasugai's well-known significance as a symbol of good-fortune, or by the placing of obseene pictures with the clothing [Yokohama]. A similar plentiful supply of clothing is thought also to be assured by the placing and leaving permanently of a certain shining green bootle, called the tama-mushi (jewel-insect), often whilst still alive, among the clothes which have been laid away§ [Yokohama]. White spots coming upon the finger nails, or a mole upon the neck, are indications of new garments for the persons on whom they have appeared.

W. L. HILDBURGH.

Archæology.

Seton-Karr.

Flint Implements in the Desert East of the Sucz Canal. By Captain H. W. Seton-Karr.

I have recently received some information from Mr. Hugh Calverley, of the Egyptian Expeditionary Force, of some fillst workings to the east of the Canal, It has been known for a long time that in the neighbourhood of El Arish flint sickle-saws and knives, with a scraper indentation (sometimes mistaken for a handle), and other implements very similar to those I found in the Fayum descrt, and on the dry bed of the ancient Fayum Lake, have been collected by Arabs. Mr. Calverley writes to me as follows:—

"I saw your flint implements from the Desert in the Cairo Geological Museum, and thought you might like to hear of some finds I made. The flints were lying on the surface of the gravel or limestone east of the Canal, in not less than twenty distinct groups, separated by sand or bare patches of limestone. Each group varied much in type of instruments, one group being worked to one rough point; another black-coloured scrapers and knives; another blue-white patinated small flaked imple-

^{*} Ibid., p. 330.

[†] W. E. Griffis, 2he Mihado's Empire, 1896, p. 472.

f These two beliefs have the appearance, to me, of outgrowths from a belief that the protective or inck-bringing virtues of the objects cited would be communicated to the clothing and thence to its wearers. While I have no record of a belief having exactly this conjectural form, I could elic various Japanese examples of affects which are thought to be produced upon a person by actions carried out upon his clothing. I have been told by an informant from another part of Japan that people wishing to be lacky in lotteries sometimes carry (secretly, if the charm is to be successful) pictures of the vulva (of which the cowry-shell noted above is a well-recognised image) or pornographic pictures in which the vulva forms a prominent feature. There is a tradition, of which I have heard from the two independent informants cited, that in the olden days soldiers carried pictures of these kinds into battle, "to keep up their courage," or kept them with their armour.

ments; another, large in number, many unfinished, and in thick concentrated patches; another white-patinated knives well worked; another with several rounded scrapers in it. All these groups about 1 to 3 kilometers apart, ranging in a triangle to Hill 176, none below Contour 50, and mostly between Contours 80 to 100. There are no polished tools. There are block-planes and borers, saws and long scrapers rounded at both ends, and a poculiar big scraper, perfectly symmetrical, flat on the back, and unground. . . , I only had ten days to work in before they moved us."

From rough drawings Mr. Calverley has sent me I imagine that they are of the same age as the El Arish and Fayum types, and that the reason why they occur here is that tabular flint and small pleess of very hard flint, suitable for the making of these particular types, occur here. This spot must have been far from fresh water unless the climate was different in the epoch when they were made. There is a fine collection of stone implements from various parts of Egypt in the Prehistoric Room in the Cairo Museum, but for want of space the late Sir Gaston Maspero used it as a store room, and it was closed to the public, and I assume that, as Mr. Calverley does not mention it, it still is so, unless the present director has re-opened it, which I trust is the case; if not I hope Mr. Quibell will do so. Mr. Calverley and myself would be glad of any remarks or suggestions by anyone with reference to these desert implements.

H. W. SETON-KARR.

America. Hrdlička.

Transpacific Migrations. By Alee Hrdlicka, U.S. National Museum.

The phases of transpacific migrations, or, perhaps, more properly spread of man, which most interest the Americans, are naturally those which have to do with the peopling of the American continent.

It is quite evident that man did not originate in the New World, for there were no higher primates from which he could have evolved. He must have come from some part of the Old World, and more especially the Asiatic continent, which affords the only practicable routes by which a primitive man could reach the new land. With the bulk of the Pacific migration, or spread of mankind, or that which relates to the peopling of the Pacific islands, we have but little to do, for the easternmost of these movements were relatively recent and could have had no rôle in the peopling of America. It seems safe to conclude that, by the time the Polynesians reached Hawaii and the Easter Island, America was already well peopled from north to south.

The migrations, therefore, that most concern us are those of the Northern Pacific, and more particularly, if not exclusively, those of the northernmost part of the ocean and Bering Strait, where, by means of a great chain of islands, and further north the mainland, the two continents come closest together. The more we know about the American aborigines, their culture, and antiquity, and about ethnographic conditions in prehistoric times in general, the more we are led to the conclusion that the northwestern route, just outlined, was the only possible route by which the ancestors of the Indian some thousands of years ago could have come. They had no knowledge of sailing vessels unless it were simple rafts with primitive sail contrivance; and in ordinary native boats or knyaks they could not have negotiated any large stretches of the ocean, but they could have reached with such craft the Commander and Alcutian Islands from the Asiatic coast, and could, of course, have readily at any time crossed Bering Strait, or even Bering Sea further southward.

To that extent our conclusions are fairly crystallised; but the great problems that confront us are the when and where and why of the spread of the people from Asia to America. These are large and important questions which will require yet

much future thought and investigation; but there are certain logical inductions applying to these points which can be formulated and stated quite briefly.

As to the time of the migration, it seems plain that in the absence of all knowledge of the New World on the part of Asiatic natives, their coming over was accidental and could not have taken place until after extensive peopling of the most of Asia, peopling which obliged some of the tribes to extend search for food, and perhaps safety, into the northern and easternmost regions of the territory; and such a degree of peopling of Asia could not possibly have been effected in very remote time. It would be difficult, if not impossible, for any of us upon reflection to assign this time any further back than the European neolithic period. Otherwise we should have to account for a separate and anterior peopling of Asia, for which we have no ground whatever.

The first coming of people to the American shores must have been, as already mentioned, quite accidental, and represented merely another step or period in the gradual extension of some Asiatic tribe or tribes northward and eastward. It was no migration in the strict sense of the word; it was merely the following of game, of food. No masses of humanity could have crossed by any of the north-western routes at any one time, for no such masses of population could have ever existed on the Asiatic part of the Bering Sea. The coming over must have been in the nature of small and repeated dribblings or overflows. At the utmost a party who found the new and richer land would return and bring over a part of a tribe or even a whole tribe, of limited numbers. In the course of time the process would be repeated with other tribe or tribes working their way north-eastwards along the Asiatic shore; and thus there were doubtless repeated discoveries and small invasious of Alaska, from which the spread over the rest of the continent was mostly in the direction of least resistance and better prospects, and hence quite easy and natural.

The separate tribes or parts of tribes reaching America, though all holonged to one main physical strain or race of humanity, brought with them, there is much reason to believe, differences of language as well as some differentiations of culture, both of which became in America, in the course of time, subject to further changes and developments.

These are, very briefly, the essential inductions concerning the north Pacific migrations between Asia and America. There is no reason to believe that, with the exception of small visiting Eskimo parties in relatively recent times, any migration has developed in the opposite direction, that is, from America to Asia. This would have been a movement against greater resistance and in the direction of lesser advantages, two natural laws which primitive people without some all-impelling motive would scarcely face and try to overcome; and it is difficult to conceive of such motive on the part of any of the prehistoric Americans.

Looking over the rest of the Pacific, and coming to more recent times, within the last fifteen or twenty centuries, we admit the possibility of small parties of men reaching America from Asia south of Kamchatka, or from the Polynesian Islands. But if such parties came, they found America already peopled, and could have had but little influence on the blood of the Americans; though they could have readily introduced a few cultural specialties or modifications. The latter fact may account for some of the ethnological similarities that are common to the two great regions.*

ALEC HRDLICKA.

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^{*} For a more detailed exposition of the subject are author's "Genesis of the American Aberiginees," Truns. XIX Internet. Chapt. Americanists. Washington, 1916.

Ireland: Folklore.

Long.

The "Wildfire" and Marriages between Persons of same Name.

By Richard C. E. Long.

The following information relates to districts in the Barony of Upper Philipstown, King's County, and the adjoining Barony of Tinnahinch, Queen's County, and has been learned by me from only one informant. I first heard of it by a chance remark and have had it confirmed by informant at intervals of a year or so, without any leading questions.

The wildfire is a skin disease, of which I do not know the medical name, affecting the neck. Informant had it when a child and was cured of it by her father, who procured the blood of a black cut and rubbed it on the part affected. No charm or anything else is required except the blood, and any one could cure with it. The blood was got by putting the cut in a bag and nipping its tail with a pair of scissors.

Independent of the black cat treatment, my informant heard a woman (whom I know) speaking of people lately who cured either ringworm or wildfire in their children by asking for bread from a house where the husband and wife were of the same surname, that is where the wife's surname before marriage had been the same as that of her husband. It is not necessary to send the affected child for the bread. Any other messenger would do. Informant had heard of the cure before but could not remember what was done with the bread or whether the sick child ate it.

There is a saying when two people of the same surname marry, "That would "cure the wildfire," but this is a mere joke. There is no belief in its being unlucky for persons of the same surname to marry each other nor any other objection to their doing so of any kind whatever.

So far my informant, whom I consider quite reliable. To this I may add from my own knowledge of this district, in which I have been long living, that there is no objection whatever to such marriages, and that they seem as common as one might expect mathematically from the numbers of people of each surname. The only restrictions on marriage among the peasantry are the prohibited degrees of the Roman Catholic Church.

I wish to make it as clear as possible, even at the risk of repetition, that there is no restriction on or objection to such marriages, because, from other instances in anthropology, I feel sure that if this article is ever noticed by any anthropologist it will be quoted as an instance of exogamy in Ireland, which it is not. When once such a statement is made it is repeated by one "authority" after another, gaining weight from each, till it becomes an article of authority in all one of authority. I trust, therefore, that I may not become the innocent cause of a new authropological myth, but it seems well to put the above facts on record, as they may lead to further information, and may perhaps be taken as an echo in folklore of some ancient rule of exogamy. If so it must be a distant echo indeed, for as far as I know there is no evidence of exogamy among the ancient Irish.

RICHARD C. E. LONG.

REVIEWS.

India: Archæology.

Archaelogical Survey of India. Annual Report, 1911-12.

The Report of the Archeeological Survey of India for 1911-12 has followed those for the preceding years in rapid succession, and the publication of the results of excavations is now being kept well abreast of the work by the Director, Sir John

Marshall. From a strictly archaeological point of view the most interesting articles are the following:-

- "Excavations at Bhita" (near Allahabad). Plates XII to XXXII. By the Director.
- "Exervations at Sahr-i-Bahlöl" (continuing the work described by Dr. Spooner in the volume for 1909-10), with Plates XXXIII to L. By Sir Aurel Stein.
- "Explorations at Mathura," with Plates LI to LVII. By Dr. Vogel,

"The Vishnu Images from Rangpur." Plates LXX and LXXL By Dr. Spooner. Mr. Gordon Sanderson's account of Shah Jahan's fort at Delhi (Plates I to XI) is also of great interest historically, and the progress of the work of restoration is described in detail from its inception. It is now possible to form a connected idea of this important work. The bird's-eye plan in Part I of the Report for 1912-13 should be consulted in connection with these papers. It is impossible to allude in detail to the numerous important discoveries announced. That which will attract most notice is the inscribed statue of King Kanishka found at Mat, near Mathura (Plate LIII). Dr. Vogel draws from the style of this statue and that of some others of the Mathura school the inference, "that the great flourishing period of the Gandhara school must " have preceded the reign of the great Kushāna rulers Kanishka and his successors." This is a heavy load to rest on such a slight foundation. Dr. Vogel here ignores the fact that figures in Kushān costume are not uncommon in Gandhāra sculpture of a good period, and also the probability or certainty that Gandhira canons of art did not obtain in Mathura, for the very sufficient reason that craftsmen trained in the traditions of Greek art were not to be found outside the limits of the recently occupied Greek states of the extreme north-west of India.

Dr. Vogel founds mother argument on the statues of the Kushān kings, who are always represented as wearing high boots in the Central Asian fashion. He thinks it possible that the statues of the god Sūrya (the sun-god), standing in his chariot (which always represent him as wearing high boots or buskins), have their origin in Kushān statues, and that they should be traced to the introduction of Mithraworship by these kings. Dr. Vogel does not allude to the fact that this argument, or one very like it, was used by General F. C. Maisey in his Sānchi and its Remains, published in 1892. General Maisey thought that the high hoots of Sūrya were signs of Mithraic origin, which be traced to the influence of the Achdemonian kings of Persia rather than to later immigrants (see his p. 128 and Plate XL). Boots of this kind were worn throughout Central Asia and in many parts of the Persian Empire, and although there is much to be said in favour of the connection with Mithras, the derivation from the boots shown in the statues of the Kushān kings seems hardly tenable.

Dr. Speener's account of the bronze images of Vishnu found at Rangpur, in Eastern Bengal, relates to the discovery of metal figures of unusual size and good execution belonging to a period not far removed from the 10th century. There is a great resemblance between these figures (especially Plate LXX (1) and Plate LXXI (3)) and the stone reliefs found in Bahar belonging to the 10th or 11th centuries, and this extends not only to the general treatment, but to the actual features of Vishnu. In Plate LXX (2), the figure on Vishnu's left is probably, as Dr. Spooner thinks, Prithivî, the earth-goddess; the lotus she carries cannot possibly be a twisted form of Sarasvatî's vînā, as Mr. Mukherji thinks. In Southern India at the present day, the figure which counterbalances Lakshmi is known as Bhū-devi, or Bhūmi-dēvi, another name for the earth-goddess.

Sir J. Marshall's Bhitā excavations have brought to light a great number of small terra-cotta, objects of which several are specimens of primitive art, going back, perhaps, to the 8th century s.c. Other groups belong to the Maurya, Sunga and Andhra, Kushān, Gupta, and later periods. The plaque shown in Plate XXIV is of great value as a specimen of Indian art of about the 1st century s.c. The figurines of the Gupta period are also of great variety and artistic value. It is impossible to do more than allade to the numerous objects of terra-cotta, stone, copper, and iron which are described and figured.

Sir Aurel Stein's account of the excavations at Sahr-i-Bahlöl is full of interest, and in his identifications of the numerous pieces of Gandāhra sculpture which have been brought to light he has had the invaluable co-operation of M. Foucher. The most important discovery from the iconographic point of view is Plate XLI, Fig. 16, a four-armed female delty holding the figure of a child, and with small tusks projecting from the mouth. Sir A. Stein agrees with M. Foucher in considering this to represent Häriti in her original form as a Yakshini. Although late, it is, he considers, undoubtedly Gandhära work, and is a very early example of the "many-armed monetrosities" of later Buddhism.

The Peshäwar Museum will be greatly enriched by the numerous finds at Sabr-i Bahlöl and other sites in recent years, and it cannot but be regretted that under the rules now enforced by the Indian Government the British Museum cannot obtain some representative pieces illustrating the latest discoveries. The local museum has undoubtedly the first claim, but the central museum of the whole British Empire certainly deserves more consideration than it receives at present.

Other articles are "Four Sculptures from Chindiman" (describing some good medieval Buddhist sculpture of the 10th or 11th century, and some reliefs of the Gupta period), "Two New Kings of Bengal," and "The Third Vijayanagara Dynasty," all of which contain valuable material. M. LONGWORTH DAMES.

Sierra Leone.

Beattle: Griffith.

Human Leopards: An Account of the Trial of Human Leopards before the Special Commission Court (of Sierra Leone). By K. J. Benttie, Barrister-at-Law. With a Preface by Sir W. B. Griffith. London: Hugh Rees, Ltd. 1915.

About twenty-five years ago it became obvious to the colonial authorities of Sierra Leone that in the deusely forested and somewhat marshy south-east region of that colony and protectorate secret societies of an evil nature existed, and that amongst their practices was a form of cannibalism carried on under the cover of simulated attacks by wild beasts. In almost all Negro Africa there has existed down to quite recent times (as in the less civilised portions of Europe and Asia) a belief in the wer-beast, the human soul entering into the body of some predatory mammal or reptile, or some transmutation of human and non-human outward semblance, under cover of which the devouring of human flesh or the sucking of human blood might take place. The writer of this review has himself sat in judgment on "wer-lious" in Nyasaland, olderly negro men generally, who obviously believed that they had power to transform themselves into lions, and in this disguise to attack and kill unsuspecting men, women, or children. In these East African instances there was seldom any indication that actual cannibalism followed the exploit, though there may have been some sucking of blood from the victims' veins, or the blood lust was satisfied with the death of the victim. But in forested Africa, more especially the seaboard forests of the west coast (notably those of the Cameroons-Niger Delta region and the dense forests of Sierra Leone and Liberia), the eating of human flesh was an incentive to the adoption either of these delusions or of these pretences fomented by secret societies.

The human leopards of Sierra Leone had from twenty-five years ago down to 1912 attained an evil notoriety. The reviewer of this book himself visited a portion of the country supposed to be infected by these secret societies in 1907, accompanying thither the Acting-Governor of Sierra Leone on a tour of inspection. The grotesque and jarring contrast which presented itself was a veneer of Christanity or Muhammadanism, great cutward respectability on the part of these chiefs who were already under suspicion, and yet an unexplained certainty that the whole region was seething with the most ghastly savagery. One felt instinctively that some of the men with clean, well-kept hands and beautifully-trimmed nails, flushing teeth, and oily airs of welcome, appraised one with their carnivorous eyes as a possible victim. Rumours and surmises became actual facts, dragged into the light of day when a series of trials took place in the year 1912. It is this series, and all that led up to it, which has been described in a businesslike and authentic fashion by Mr. Beattle in the book under review.

But there is much that we have yet to learn on the subject of these secret societies in the recesses of Sierra Leone and Liberia, and it is a pity that so far—no doubt for good official reasons—Mr. Northcote Thomas, the Government Authropologist of the Sierra Leone Protectorate, has not been enabled to institute his researches in that region, though he has already accumulated information concerning Sierra Leone likely to be, if anything, more interesting and eye-opening that his previous work on Southern Nigeria.

Sierra Leone, both coast colony and hinterland protectorate, is an area of only 30,000 square miles in Western Equatorial Africa, but, like Portuguese Guinen, not far away, and Liberia alongside, it has more interest to the square mile for authropologists and ethnologists than many other sections of the continent which might run to 100,000 or 200,000 square miles in extent. And strange to say, though it has been an appenage of the British Crown for something like 130 years, it is still one of the least known parts of Tropical Africa, though it is possessed of exceedingly beautiful scenery and—away from the coast and the human leopard region—a not very unhealthy elimate. Although it has had a number of lurid and masty episodes in its bistory, such as those related in this volume, it happens to be at the same time one of the most successful instances of wise colonial government which we can show in Africa, and is an exceedingly prosperous dependency.

H. H. JOHNSTON.

Africa, West.

Cureau.

Savage Man in Central Africa. By Adolphe Louis Curean. Translated by E. Andrews. Pp. 351. London: T. Fisher Unwin. 12s. 6d. net.

The title of this work is misleading; its scope is better defined by the sub-title "a study of primitive races in the French Congo." The late author has been for over twenty years an official in the French Congo, and the book gives an account of his impressions of this country. These are essentially and typically those of a fonctionnaire, whose daily daties bring him into constant antagonism with the natives, and who, consequently, is entirely debarred from any real intimacy with them. Thus the author's claim to have penetrated the black man's mind is not substantiated by his book. It is to be hoped that the sample of his linguistic knowledge given on page 29 has suffered cruel handling by the translator, as—

o mamagne mapembe mabote does not mean white stones (are) beautiful, but stones white (are) good.

The work is divided into three books, the first of which deals with the influence of environment. The second is supposed to give an account of the psychology of the Negro; it is a severe, and I believe, unfair indictment of the whole race. According to Monsieur Cureau, the Negro is rather inferior to the European in the

acuteness of all his senses; he cats by preference carrion; he lacks either in stability or intellectual and moral memory; his feelings of affection are superficial and so are his feelings of hatred; he has no innate sense of kindness; and vanity, pretentiousness, stapidity, and tyranny grow out of his egoism. Integrity is unknown to him unless enforced by threats or fear; he is neither merry nor sprightly, nor yet humorous; his inferior intellect "is one and the same for the entire race. One Negro differs "very little, psychologically speaking, from another Negro."

The tendency of generalising results in statements like "the Negroes are satirely "ignorant of kissing," "wind instruments are unknown in the Congo Basin," and "the Fans are the only tribe of my acquaintance who possess a spoken literature." It may be safely assumed that the last statement is equally incorrect for all tribes in the Congo Basin, and this assertion alone ought to put the reader on his guard against the views of the author.

The third book deals with sociology, and is written on the same lines as the others. The photographs reproduced as illustrations are excellent, but have, for the the most part, no connection whatever with the text.

E. T.

Siberia: Natives and Colonists.

Czaplička.

My Siberian Year. By M. A. Czaplička, London: Mills and Boon, Ltd. n.d.

Miss Czaplička has written an ideal book of travel, as she gives a great deal of information about North-Central Siberia and its inhabitants, lightly connected with the chronological order of her journeying, and always with a delicate and humorous touch of the personal element, which gives the book a very human atmosphere. How well she was qualified for her task is evident to those who are acquainted with her excellent compilation, Aberiginal Siberia (1914), and from the fact that she was trained in the Oxford School of Authropology.

The book is frankly a popular record of research and personal experiences, and as such it should appeal to a wide circle of readers. Those who read Man will look forward with impatience to the publication of Miss Czaplička's detailed investigations. In the meantime they will do well to make themselves acquainted with this book, not merely as a whet to the appetite, but because it does serve a definite purpose. The country through which the expedition travelled, the climate, and the biological peculiarities are little known to the general reader, but a knowledge of them is essential if we are to gain an accurate conception of the life of the inhabitants. This Miss Czaplička always keeps in view, and thus the book is of exceptional value as a study in Anthropogeography. We not only obtain a knowledge of the conditions of life of the people, but the author's own experiences, and various anecdotes of certain of her native friends bring out clearly the hard struggle for existence and the efforts made to alleviate it.

Miss Czaplička indicates the various waves of migration among the people she visited. The Paleo-Siberians do not come under consideration. She describes the Neo-Siberians as novices as compared with the older inhabitants, but still their skill in grappling with the problem of the difficult climatic conditions in the Arctic impressed her greatly. In a few words she hits off the salient aconomic differences between the Samoyed, Tungus, Yakut, Yenisei Ostyak, &c.

The Sibiriaks are, to speak broadly, the colonials whose ancestors have been settling in Siberia, voluntarily or involuntarily, since, say, the end of the Middle Ages, and in whose veins may run the blood of the Little Russian, the Great Russian, the Pole, the German, the Jew, and the aborigine. The exiles fall into two groups, political and criminal: "The policy of the home Government in dump"ing their human rubbish on to Siberian soil is not satisfactory, to put it rather

"mildly, from the Sibiriak point of view. . . . The criminal exile, in many cases physically and mentally degenerate or diseased, is not the type of which a satisfactory settler can be made." The "politicals" are a very different type, "who always form themselves into a society which exercises a moral control over all its members." The official policy of lumping together these two classes of people who have absolutely nothing in common is due to a desire to discredit the politicheski in the eyes of the Sibiriaks.

Miss Czaplicka exhibits great restraint and circumspection in dealing with the treatment of the Siberian problem by the Russian Government, and, therefore, her statements carry conviction as being an impartial record of facts. It is to be hoped that a full and accurate Russian translation will be made of this excellent book.

A. C. HADDON.

Sarum Lore. Stevens.

The Festival Book of Salisbury (Salisbury, South Wilts, and Blackmore Museum, 1864-1914). Edited by Frank Stevens.

This interesting volume was prepared in 1914 to commemorate the jubilee of the famous Blackmore Museum, which was founded in 1864. The editor is Mr. Frank Stevens, Resident Curator of the Museum, and he and the Museum Committee must be congratulated on their decision to publish the book, though the proposed festival stands postponed.

To a Wiltsbire, and especially to a Salisbury man, the contents of the volume will make special appeal, but they are of interest to all who have an appreciation of antiquities, bygones, and local history. First place must unturally be given to the article on "The Fossils and Prehistoric Remains of Salisbury," by Dr. H. P. Blackmore, the prime mover in the foundation of the museum, and now its honorary director. A full list of the dozen or so articles cannot be given here, but its range may be judged from the following selection: "The Great Bustard," "Old Sarum," "Civic Salisbury," "Old Salisbury Industries and their Remains," "The Giant and "Hob-Nob and their Story." There are many illustrations, including a number of plates of "Salisbury Worthies," and of "Notable Objects" in the museum.

Attention may be called to the genial invitation of the Curator to visit the museum and accept his guidance. The value of such a museum is far more than local, and it is pitiful to have to record that there is a collecting box at the door. This need not alarm the indigent amongst us, however, since by contributing a penny piece the visitor will show more than the recorded average degree of generosity. Some day, perhaps, all reputable museums will be State-aided institutions, with grants depending upon local rate contributions and upon the provision of an adequate scientific staff. This would involve official inspection, but when-or if-science comes into her own, inspectors will perhaps deal with subjects which they have been trained to understand. At present the provincial curator is badly in need of supportfinancial, scientific, and moral—to help him to overcome the inertia, or even opposition, of those to whom education is merely one of the causes of increased rates and taxes. It does not appear that either the excellence of the collections in the Blackmore Museum, or the influence of those who have made this festival book, has been sufficient to establish the finances of the museum on a firm basis. In view, however, of the Government's decision to close the national museums for the period of the war, surprise can scareely be felt that local authorities take the narrow view. There are plenty of picture palaces. H. S. H.

North America: Anthropology.

Rogers.

Indian Population in the United States and Alaska, 1910. Issued by the Department of Commerce, Bureau of the Census, Sam. L. Rogers, Director. Washington, 1915.

There is no more valuable anthropological document than a census report. A census is the anthropological method of feeling the pulse of a people; a report is the anthropologist's bulletin. In the present case the patient is particularly interesting—namely, the American-Indian population of the United States. The bulletin for 1910 is more detailed and of greater importance to anthropologists than any of its predecessors. In the Census of 1910 special schedules were issued for the Indian population, and special agents were appointed to deal with them. The sections of this Report which deal with the Indian population, the proportion of mixed blood, the sex distribution, the age distribution, stock, tribes and mixtures, fecundity and vitality, were compiled and written by Dr. R. B. Dixon, of Harvard University; while those sections which deal with marital conditions, school attendance, illiteracy, ability to speak English, occupation, and taxation were assigned to Dr. F. A. Mackenzie. Both have done their work well.

In the three centuries which preceded the Census of 1910, that area of the the globe—3,000,000 of square miles in extent—which now constitutes the United States of America—has been the scene of the greatest revolution which has ever taken place in the world's population. In the year 1910 there were, broadly speaking, 92,000,000 of people of European parentage, 8,000,000 of African parentage, and only a little over a quarter of a million (265,683) men, women, and children, who could claim a descent from the pre-Columbian possessors of America; scarcely enough of the original inhabitants remain to people one of the suburbs of a modern American city. Even of the 265,683 individuals commerced in the Indian census, only 150,000 could claim to be of pure blood. It is true that 280 tribes can still be enumerated, but 10 of these had only a single representative—often impure; 42 of them had 10 or less adherents; only 77 of the 280 had more than 500 members.

The 101 tribes found on the Pacific slopes - chiefly in California - could only count amongst them some 16,000 adherents. The remnants of the tribes which occupied the Atlantic States are more European than Indian in blood; in the central States the Indian blood predominates over the European; in the south-west the Indian blood is mostly pure. The Census of 1910 shows that although nominally the Indian population holds its own, in reality it does not; Dr. Dixon shows conclusively that fertility and vitality increases with the infusion of European blood. Nominally the Indian is holding his own, because every individual in whom an appreciable amount of Indian blood can be recognised is counted as an Indian. While the absolute number of nominal Indians remains stationary, the European and African elements in the race increases at a rapid rate. There were over 18,000 scattered Indians enumerated-Indians which had fallen out of a tribal organisation. The tribal reealcitrant must prove an ever-increasing factor. The tiny tribal islands of natives cannot withstand the erosion of the Republican Sea by which the Indian is being overwhelmed. In 1910 about seven Indians out of ten could speak English; in 1900 only six out of ten could answer that test. In 1910 rather a larger proportion (27-8 per cent.) were following a "gainful labour" than in 1900. There can be no doubt that the Indian tribal elements will disappear in the European sea of the States, and not the most skilful anthropologists in the world will be able to detect a trace of the red man's blood in its final waters.

A people under a tribal organisation is one which must always have an interest for the anthropologist. Until these later days—of Neolithic and subsequent cultures the world's population was organised as tribes. It was undoubtedly under the tribal system that our present races of mankind were evolved. We therefore turn to the 1910 Census to see how evolution works. We see at once that certain stocks and certain tribes have become overwhelmingly strong compared to others. If we take five tribes—the Cherokee (Iroquean stock), Navajo (Athabascan stock), Chippewa (Algonquian stock), Choctau (Muskhogean stock), and Teton Sioux (Siouan stock)—we have in these five nearly as many members as in the remaining 275 tribes. They represent dominant conquering types. Under a tribal organisation we can see the workings of evolutionary factors in a population much more diagrammatically than in the nationalities of Europe.

In conclusion, we would offer our congratulations to all who are responsible for the Indian Consus of 1910, and assure them that they have produced a work of first-rate importance to all who study the laws which regulate the lives of modern races of markind.

A. KEITH.

Physiology.

Bainbridge: Menzies.

Essentials of Physiology. By F. A. Bainbridge and J. Acworth Menzies. Longmans, Green and Co. 1914.

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In this volume, intended for the use of the medical student about to take a pass examination in physiology, the authors have managed to compress an enormous amount of information into the smallest possible space. It has not been possible to give many histological details or those of a number of common chemical or experimental methods, but were the book printed in smaller type on thinner paper it would be perfectly fair to describe it as a remarkably successful pocket dictionary of physiology. Tested from this point of view very few omissions will be found.

C. G. S.

Spain: Archæology.

Breuil: Obermeier: Venner.

La Pileta a Benejan (Malaga), Espagne. Par H. Breuil, H. Obermeier, 21 W. Venner. Monaco, 1915. Pp. 65. Illust. and XXII Plates.

This is another of the finely illustrated monographs on the murally decorated caves of France and Spain published at Monaco. Although from an artistic point of view it cannot vie with the Cantabrian and Aquitanian caves, its decoration shows distinct analogies with them, and it is of great interest on account of its southerly position. It offers another link in the chain of direct evidence of paleolithic migration into the Peninsula from the south.

The cave is situated about 700 metres above sea level in the Cerro de la Pileta, a peak in the north-east of the Sierra Libra, a mountainous district in the Province of Malaga. It is about forty miles, as the crow flies, from Algoricas.

Some years ago the cave was explored by native peasants in search of bat guano. They found many earthen vessels, and were astonished to see some of the walls covered with all sorts of incomprehensible designs, or Letreros as they called them. About six years since Colonel Willoughby Venner, when on an ornithological expedition heard of these from his muleteer. Consequently he paid several visits to the cave, and sent an account of his experiences to The Saturday Review.

The cave is very extensive and complicated, and its exploration is quite a climbing expedition, ropes being required to get through in some places. It emphasises, even more than any of the caves further north, the extraordinary fact that palseolithic artistic work was executed by artificial light, far from the entrance and in positions difficult of access. The place where the best collection of drawings is found is a narrow little side passage, some 200 metres from the entrance. Since these drawings show that the primitive visitors to the cave attached great importance to this spot, the explorers gave it the name of Le Sanctwaire. It is necessary to proceed another 150 metres, nearly to the end of the cave, to find the most striking and

interesting painting in it. This is a large drawing of a fish on the wall of the last chamber, hence called the Salle du Grand Paisson. It is painted in black and is a very good representation of the animal seen from the side, the candal fin being well shown. This, with some other incomplete drawings, are the only paleolithic paintings of fish yet discovered. The other mural drawings of fish, as at Niaux in the Pyrenean region, Gorges d'Enfer in Dordogue and the Cantabrian cave of Pindal, are engravings.

The majority of the paintings on the walls are geometric or inchoate designs which Abbé Breuil has done his best to analyse, classify, and, as far as possible elucidate. The drawings may thus be arranged in two groups, zoomorphic and inanimate. But they may also be classified in three divisions according to colour, a classification of great importance, because it is also one of age. The oldest paintings are yellow in colour, then come the red, and lastly the black. It is possible moreover, to distinguish, amongst the last, those of pakeolithic age from others of

more recent date.

The yellow paintings are the most ancient, and are found chiefly in one part, of the cave, called by the explorers the Galérie Inférieure. They are of two kinds, serpentiform and animal. So many of the former kind are collected in one part of this gallery that the name Salle des Serpents was given to it. The serpentiform designs are composed of parallel curves in twos, threes, or fours, and recall the meandering lines traced in the clay surface at Gargas and Hornos de la Peña. There is this further resemblance, that amidst these curved lines are figures of animals. The animals represented in yellow are horses, ibex, hinds, and bulls. In their style they resemble the animal paintings of the Cantabrian caves, especially the yellow paintings of Castillo and La Pasiega, and they may well be referred to the same age, viz., the Aurignacian.

The red paintings are in thirty cases in contact with the black, and their relative position shows that they are the older of the two. They may be said to present a special phase of the art intermediate between the yellow and the black. The red animal figures include the horse, bull, hind, and bison. The presence of the last, evidently the same as that of the Cantabrian caves, is of much interest, for, excepting two small figures at Cogul, it has not been observed in Spain outside the Cantabrian district. The inanimate designs include claviforms like those at Niaux, Altamira, and Pindal, and spirals. The latter are in some instances of a complicated character. Pictte discovered spirals engraved on reindeer horn in Pyrenean caves, and M. Breuil has suggested that these Magdalenian spirals were derived by stylisation from the horns, eye, and ear of the bison. But there does not appear to be any ground for associating these with the spirals at Pileta. Possibly they may represent serpents, and be comparable to the figures of these animals drawn on the ground by the Australian aborigines in connection with their totemic ceremonies.

The black paintings fall into two groups, one of palsoolithic age, and another of more recent symbolical designs. The palsolithic group comprises: (1) Animal figures. (2) Serpentiform designs. (3) Schematic designs of men, animals, and other subjects. About 80 figures of animals have been recognised, of which, however, a good many are mere fragments. There are 17 of the ibex, 14 of the horse, 9 of the stag, 17 of bulls, and 6 of fish. These paintings are mostly found in three places not far apart, vis., a small recess out of the central part of the cave, called the Salon, the little passage already referred to as the Sanctusire, and a part of the lateral gallery, called the Galérie des Bougustins. In the last is a very good painting of an ibex. It is in fact the best animal drawing in the cave, and recalls strikingly similar Cantabrian figures.

In the sales, more than 150 metres from the entrance, are several panels of animal figures, including those already mentioned, and, in addition, a fish, a large but incomplete drawing. In the Sanctuairs the right overhanging wall is completely covered with black paintings of animals and inanimate designs. They are superposed on red paintings, and the wall is entirely furrowed with markings of bears' claws. Here are also two representations of the human body in the form of highly-stylised figures. Body and limbs are mere lines; the head of one is triangular, of the other oval in shape. They recall some of the figures on rocks in South-east Spain. The next part of the cave contain a little lake, and beyond this there are not many black figures of animals, but those found there are of exceptional interest, for they are of fish. In a short discriticulum are incomplete drawings of two fish. These are curious because they are recognised not by the colour, which has perished, but by the appearance of the clay it formerly covered. The paint has acted as a sort of protecting varnish, with the result that the clay beneath it has not been so fully worn away as that covering the rest of the surface.

Near the end of the cave is the remarkable large painting of a fish already referred to. Serpentiform designs are found almost everywhere where suimal figures exist. They raise the same question as to their meaning as do the yellow figures of the same shape, but they are rarely composed of sories of parallel lines. Some of these designs are possibly tectiforms, but they are certainly not so convincing as those seen in the Cantabrian caves. The more recent black symbolical designs are very numerous, and are the only ones the first explorers noticed. They are the Letreros, the celebrated inscriptions which no one can read. "They were well suited in virtue of their " number and good state of preservation to strike the imagination of peasants always " in search of treasure hidden by the defeated Moore." They are found especially in the Galerie Liferieure, in the neighbourhood of the lake and beyond; strikingly so in the chamber containing the painting of the great fish. The most interesting of these designs are the so-called Pectiforms, 200 of which have been counted, the number of teeth varying from 3 to 15. They recall the similar designs observed at Altamira and Marsonias. In the latter the teeth are often turned upwards, a fact which gave rise to the idea that this design represented a stylised hand. This form is not seen at La Pilets. These most recent designs probably bring us down to Neolithic times, to which period no doubt belonged the numerous pot-sherds found in some parts of the cave. Some of this pottery is ornamented with incised designs.

Such in its main features is the decoration of this interesting cavern. The paintings evidently extended over a long period, and their relations one to another are not yet perfectly and fully clear. But one important fact emerges. It is that the earliest artistic drawings were the work of a people closely related to, if not the same as, those who ornamented in a similar way the walls of the Cantabrian caves.

E. A. PARKYN.

ANTHROPOLOGICAL NOTE.

Accessions to the Library of the Royal Anthropological Institute.

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(Donor indicated in parentheses.)

Träskfolket svenska Rhodesia-Kongo-Expeditionens Etmografiska Forskningsresultet. By Eric von Rosen. 458 pp., 3 Maps, 78 Plates, 401 Figures in text. Albert Bonniers, Stockholm. (Author.)

West Indian Studies. By D. Hedog-Jones, M.A. 7 × 4³/₄. 97 pp. Grenada, B.W.I. (Author.)



CANCE PROW ORNAMENTS FROM NETHERLANDS NEW GUINEA.

ORIGINAL ARTICLES.

With Plate C.

New Guinea: Netherlands.

Seligman.

Cance Prow Ornaments from Netherlands New Guinea. I. C. G. Seligman, M.D.

Plate C represents a number of cance prow ornaments from Netherlands New Gainea now in the Vienna Museum (Nos. 14660 and 14662-14664). Dr. Heger, who kindly had these specimens photographed for me, could not tell me their exact provenance, but a comparison with those figured by de Ciercq and Schmeltz (Ethnographische Beschrijving van de West-en Noordkust van Nederlandsch Nieuw-Guinea, 1893, Plate XXV) leaves no doubt that they came from the country immediately to the west of Humboldt Bay; indeed, it is possible that the largest of the specimens here reproduced is identical with one of those (No. 12) figured by de Clercq and Schmeltz.

In the ninth volume of Max (1909, 16) I figured and described a series of carved canos prow ornaments from south-eastern British New Guinea. These specimens, called susmasseris, were collected upon Murua (Woodlark Island), and resemble those from Netherlands New Guinea in general form, i.e., they consist of a flat, muchcarved portion above a plain peg-like projection which serves to lash the object to an upright in the prow of the canoe. A superficial glance would suggest that the resemblance ends here; the carvings on Plate C are for the most part easily recognisable and scarcely conventionalised representations of birds, whereas the carving of the Massim munkuris consists of the elaborate scrolls and coloured intaglio areas characteristic of the district, which may or may not be surmounted with small, decorative, and highly unrealistic representations of birds. But reference to the explanations of the carving on these municipals given me by natives of Murua shows that much of the conventionalised carving, including the scrolls, is recognised as representing birds, so that it would seem that these wanksuris and the Netherlands New Guinea cance-prow ornaments are morphologically equivalent. Birds are the most important of the linked totems of the Massim, and though I cannot say that all the birds represented on the wunderis are totem birds, the reef heron, which seems most commonly represented, and the cockatoo certainly are.

This suggests that the natives of that part of Netherlands New Guinea may have totem birds; time should prove whether this conjecture is correct or not, but in any case it is interesting to speculate on the factors which have caused one set of people using these canoe ornaments to carve them in elaborate conventionalised scrolls, while the carvings of the other are comparatively naturalistic.

The first thing to note is that a distance of more than 400 miles separates the Cape Nelson promontory, the western limit of the Massim, from Humboldt Bay. The coast line of British New Guinea accounts for about 100 miles, and so much material has passed into our museums from here that I think it can be definitely stated that no cance ornaments of the type under consideration occur in British New Guinea west of the Cape Nelson promontory. Probably this also holds true for the 300 miles of coast line intervening between the old boundary of the British possession and the Netherlands boundary; at least I have seen none in the Vienna, Munich, and Cologue Museums, nor have I noted any record in literature. The considerable geographical gap between the two peoples using these cance prow ornaments suggests either: (i) that a continuous series of related peoples who made such ornaments once stretched from the Massim area to Humboldt Bay; or, (ii) that either Humboldt Bay or the Massim area is the home of this particular type of bird cance-prow ornament, and that a migration is responsible for its appearance

some 400 miles away. In any case it is necessary to account for the scrolls of the Massim munituris, and I suggest that the Humboldt Bay ornaments represent the more archaic form which became modified in the Massim area by the influence of a foreign culture, Polynesian or Melanesian, of which there is abundant evidence in the district. In other words, while the basic idea of the ornament remained unaltered, a people who may almost be said to have "seen" in curves (if not in spirals) succeeded in imposing their idea of representation upon the simpler animal forms of the folk with whom they mixed.

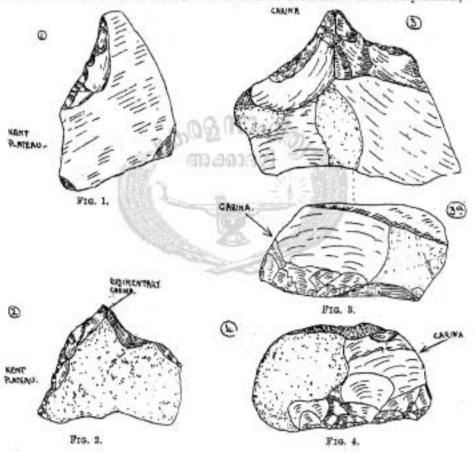
C. G. SELIGMAN.

Archæology.

Moir.

The Evolution of the Rostro-carinate Implement from the Primitive Kentian Plateau Implements. $By\ J.\ Reid\ Moir.$

In a paper read recently before the Royal Anthropological Institute "On the "Evolution of the Earliest Chelles Palmoliths from the Rostro-carinate Implements,"



and to be shortly published, I described the manner in which, in my opinion, the earliest Chelles paleodiths were evolved from the restro-carinate implements. In this note I propose to set forth my reasons for believing that the restro-carinates have been evolved from the primitive Kentian plateau implements. Fig. 1 illustrates the earliest form of implement known—it is simply a tabular piece of flint steeply flaked on one side into a hollow. Fig. 2 illustrates the next stage, in which both sides of the fint have been flaked—the point of junction of the two flaked edges forming the well-known type of primitive "borer." The conjunction of the fracture surfaces of the

two hollows has also given rise to a ridge which, in my opinion, represents the first stage in the production of the carina of the rostro-carinate implements. I would suggest that the most primitive pointed implement was evolved in a manner similar to the Le Moustier (palmolithic) points. First one edge of the flint was used as a racloir and then the other; the result being the formation of a well-defined point. Fig. 3 illustrates an implement found beneath the shelly Red Crag at Martlesham, Suffolk. (These primitive forms are extremely rare in the sub-crag detritus bed.) In this case a tabular piece of flint shows two hollows on either side of one end, as in Fig. 2, but the hollows are more accentuated and their respective fracture surfaces have conjoined and produced the well-known carina of the rostro-carinate form (Fig. 3a). The next stage is illustrated in Fig. 4 (the implement was found below the decalcified erag in the brickfield of Messrs. Bolton & Co., Ltd., Ipswich), where the two hollows have become still more marked, and have resulted in the formation of a definite "beak" at the anterior end of the implement. It seems evident that the rostro-carinate in its earliest stages is simply a development of the most primitive point. It seems evident also that the earliest Kentian plateau implements were used as "hollow-scrapers," and that with their gradual improvement a much more effective cutting edge was inevitably produced in the formation of the carina. The transition from the oldest rostro-carinates to the earliest Chelles palsoliths seems equally clear. The drawings illustrative of my remarks are severely diagrammatic, but the actual flaking of each specimen is accurately defined. J. REID MOIR.

Linguistics.

Thomas.

Notes on Kukuruku. By N. W. Thomas.

In 1911 I published in my Report on Edo-Speaking Peoples, Vol. II, 52 pp. 143-146, some notes on the grammar of the Wano dialect of Kukuruku. The accompanying fragment of a story illustrates some of the points.

The pronunciation of different informants varied considerably, some showing a strong tendency to palatalise, and ukpuv'oba (kokonut) was heard as ukpujoba; others made stops into fricatives, e.g., are for oks, which was also heard as okre and oks; another informant spoke oge as okre; conversely are was heard as abri, are as age; in each case I take the ordinary pronunciation as the standard.

There seem to be three, if not four, t sounds, one interdental as in o/a (tree), represented by f, which closely resembles an English tth (the first t unexploded), and must be carefully distinguished from t (alveolar) as in oto, ground, and t (postdental), as in oto, soap. In t the tip of the tongue is turned up as in a cerebral t, but the tip touches the palate close behind the teeth and is then drawn sharply back; the same sound is heard in its (uine), but it is less pronounced. A pure cerebral t of the ordinary kind is also found, I think, in a few words.

Corresponding to their postdental t and d is an alveolar r, in which the tengue is also turned back but touches the teeth, e.g., in ra, before the articulation; it resembles d.

There is an ordinary l, not quite the same as English, and a mixed l with vibration, here transcribed as l. Corresponding to the labic-velar p, b = kp, qb, there is a similarly formed m, bearing the same relation to b that b does to b.

The vowel sounds include front and back a as in agws (dog), agws (crow), and a diphthongised a as in ids (night), pronounced with the tongue against the lower teeth, not unlike English a in have, but longer. A variant of this sound is found in ofer. Open a and a are denoted by g, g, ...

Four tones must be distinguished—high, high-mid, low-mid, low; in a small number of nouns I found the following combinations:—1—4 (twice), 2—3 (twice), 3—1 (twice), 3—2 (five times), 3—3 (twice), and (2+3)-2, (3+4)-4 (one

each), the pitch being approximately g or f sharp for high, f for high-mid, e for low-mid, and c for low.

In the text the following points may be noted :-

- (1) The third pers sing subject pronoun is ρ for persons, ε for things; probably the vowel varies in the latter case according to the prefix vowel of the noun referred to; this pronominal ε may account for the form (not found in the text) gn gyδί (this man); here the pronominal adjective gnα, is prefixed, contrary to the usual rule of the Edo languages.
- (2) The 3rd plu, is e, but a is used in an indefinite sense, e.g., a dza do aki, which may be translated by a passive construction, "the market is"; but possibly a in this case is assimilated to the final a of Amiya. The object pronoun is la for both persons and things, but e may be used for persons; there is also a form emi; this form is perhaps seen in Ego we lu mi, which seems to mean "Ego who forged them," but may perhaps mean Ego of Elumi, clumi being one of the days of the week; clision of the second vowel is also seen in ukpugo (cowry), pl. ikpigo or ikpego, the full forms being ukpo ego, ikpi ego: ukpo is a generic term for a small round thing.
- (3) The form wowose is abnormal; ise is the ordinary word for five, but special terms for the counting of cowries are not uncommon.

Omoga lag Egg, eb efa lag iyo la e fe via la, in efa lag Omoga and Ego, when father and mother their they bore them, then father and iyo la egumi; eb e fe gu, in Egi o ra dna la; eb Egi o fe mie mother their die; when they died, then Egi he goes meet them; when Egi he saw la eveva, q ra gw oba; o dra oba; o mi e ne mo ekbebe; oba them two, he goes tell king; he then (to) king; he sees those who have trouble; king o dra la: ra d osake ekbebe.

he then (to) them: go drink poison (for) trouble.

Bb efegwefegweta e fe fo olo re, e ra d osake ekbebe; Omoga When next day it began (!) go, they go drink poison (for) trouble; Omoga lag Ego e dza vo ema; in e ra; e dza t iko nits Ogiofa and Ego they then take things; then they go; they then reach house of Ogiotha re; e dza ra wa x Ugiofa o xi okpisa; e dza p iko ya come; they then go meet that Ogiotha he is old man; they then clean house at kim Ogiofa, round Ogiotha.

Ogiofa dza ya la: eme wa lu? Ego nelumi o x aki o do.
Ogiotha then to them; what you do? Ego nelumi she that market she goes.
Omoga o x olu o tse. O dza f ikpego la ejie, in o f
Omoga she that cotton she spins. He then takes couries they four, then he gives
eva n qua, in o f eva n ona; in Ego nelumi o du ikpate aki
two to this then he gives two to that; then Ego nelumi she puts culabash market
oto; o du ikpego eva kwo; o kia wa; in o d ebits
(on) ground; she puts cowries two inside; she goes on; then she goes house (?) of
Okpotobegyesomi re.
Okpotobegyesomi go.

O oli: se lo mi ugye uo se d aki Opiemere; in o se She to him: make her see road they take go market Opiemere; then he makes o mi ugye; in o kia wa; in o d ebits Asilogye re; Asilogye o her see road; so she goes on; then she goes house (of) Asilogye go; Asilogye he se o mi utogye; in o se o d ebits Ainya re; o digwa makes her see road; so he made her go house (of) Ainya go; she kneels (at)

ode Ainya; in o pi oxa: "Ainya kunyo ma ya tse, Ainya, kunyo door (of) Ainya; so she put song: "Ainya, open for us, please, Ainya, open ma ya tse." In Ainya o kunode a; o fere iko; in o ku for us, please." Then Ainya he opens door his; she enters house; then she puts ema ere.

things there.

Unode Ainya a dza do aki ; in o / ikpego eva m obo Door (of) Ainya they then meet market; so she takes couries two in hand bare aki; in o f nkpugo okpa d ifefe, in o f ukpug okpa go market; so she takes cowry one buy ground nuts; so she takes cowry one in o f ikpioi gba; in o f i/e/e gba; in ikpotso buy calabash seed; so she takes seed spread; so she takes nuts spread; so women e bare; in 'e ra wa x o ∫ ife∫e gba; in okpoteo okpa o y they come; then they went meet that she took nuts spread; so woman one she to oli: / ifefe na lo de; in o y oli: de; in o y oli xi her: take nuts give her buy; so she to her: buy; so she to her that she buys in onoke o bare; in o y oli x i/e/e bag (16,000 couries); so other she comes; so she to her that unts (of) Ego that qua; a x a fe la ny omi, a ge f ume yo; xi q those; they when they put them in soup, they not put sait there; that she buys emi; in e xa eno; in oy okpa de 1 emine; in o them; so they dispute; so person one buys them bigger (price); so he buys nwnose; in o ka nwnose; in o vo i/c/c. bags five : so he counts bags five ; so he takes nuts.

In ikpotso wewe e ge bare; in e ra wa x o f ikpiol gba; So women other they again come; so they go meet that she takes seed spread; in okpa y oli; xi o ge de uwe; in onoke o bare; in o xi so one to her; that she again buys (for) bag; so other she comes; so she that o de uwese; in o vo ikpiol er okpa u er okpa e ke; in she buys bags five; so she puts seeds place one that place one it in left; so ay ewewe e ge bare in e ra lu inyo ikpiol n oy okpa o people other they again come so they go do same (with) seeds that man one he ge de uwuose.

again buys bags five.

Ethnography.

Migeod.

The Racial Elements concerned in the First Siege of Troy. F. W. H. Migeod.

Mr. Harold Peake, in his article in the Journal, Vol. XLVI, p. 154, I think rejects rather too absolutely such historical evidence as we have. He places the fall of Hissariik II in about a.c. 2225, on an irruption of northerners from beyond the Danube. Now our sole historical knowledge of Troy is derived from Homer, and although much may be allowed for poetic licence, there is nothing vague in the narrative. It is indeed hard to get over the fact that Homer says that the war was waged by the states of Greece itself united in a confederacy; and be further amplifies his record by giving the number of ships each state supplied. Another important point is that Homer recognises that the speech of Trojans and Greeks was mutually intelligible. At least that is what one may infer from their intercourse. It may, therefore, not be impossible that the Trojans were part of the great Ionic race which rose to high civilisation, and in later centuries imparted its culture to Greece proper.

The next record we must turn to is that of Moses. Moses, writing about

the far north.

s.c. 1500, gives with precision the relationships of the neighbouring nations as known to him. He states which were of kin, and it is clear from his narrative that these nations were already in the localities in which he knew them some five or six centuries before his time. He states, which is what concerns us here, that the nation of Iun (for Javan was so written in the ancient script before vowel points were added some six centuries a.D.) inhabited the islands (of the Ægean Sea), and that they sent out colonies. It may, therefore, be inferred that the Ionic or Greek speaking peoples were to be found in islands of the Ægean Sea as well as on the shores of the neighbouring continents. As this period was, it may be accepted, not far removed from the date of the destruction of Hissarlik II as computed by Mr. Penke, we have some support for Homer, who would scarcely have composed his epic in order to relate the doughty deeds of unknown barbarians rushing out of

It remains now to reconcile the evidence put forward by Mr. Peake with that of Homer and Moses. This is possible if it can be shown that the invaders had, before attacking Troy, settled themselves in Greece, and had been there sufficiently long to have completely merged into the local population, and to have adopted the Greak language (or its then prototype) to the loss of their own. To do this Mr. Peake would have to antedate the stream of invasion he refers to as passing into Thessaly very considerably; and this inroad would have to be carried right down into the Peloponese. F. W. H. MIGEOD.

Sudan (Anglo-Egyptian).

Shaw. Jieng (Dinka) Songs. By Rev. Archibald Shaw.

A Jieng song is generally in vogue for a limited time only. Any new 34 circumstance, such as being raided by another tribe or the rise of a new tiet (one who claims to be a prophet or to have special intercourse with the Divinity), produces a fresh series of appropriate sough or hymns. Songs may also be acquired from a neighbouring Jisng tribe and adapted to fit the new dislect.

Those sung by the Bor tribe of Jing (east bank of the Bahr el Gebel) are divided into three classes, such division being possibly due to the varieties of rhythm employed. The names of the classes are forms commonly used as the names of men, but my Jieng informants cannot trace them to any actual persons, and I am unable to say whether the same names and divisions hold with other Jieng tribes.

I .- DIET KE (SONGS OF) YAL.

These are not sung to the drum. One man sings the solo facing the remainder, who alternately crouch in a densely-packed group and then rush forward to a new position. The women follow closely with shrill cries, making mimic thrusts with spear hafts at the men.

The first example is the chief war-chant of the Bor tribe. It is used on important occasions of ceremonial, and also by parties of men doing combined work, such as hauling heavy timber, &c. Author not traced.

The second was composed by a tiet named Wal, of the Aliab tribe, an account of whom is given in a Note by Dr. C. G. Seligman in Man, 1915, 20. Only one man of the Cic tribe visited Wal, and the song illustrates the displeasure of his "spirit," Deugdit, with the Cic tribe in consequence of this neglect.

(Solo.)

Ye gon akwain cok e noknok

Ci nong heden ca loi e ye.

(Solo.)

The vulture follows my steps with flapping of wings

As if there were something that I had done for him.

(Chorus.)

Mno wai e Nyandior, wai ana ran.

(Solo.)

Gon engo ein ye ngwet ne ken an lo?

(Chorus.)

E n ya ngwet, ya yi.

Waidie ay'acuil bioth, Waidie aye gon bioth ke cuor.

"Cuor," the blackheaded vulture.

"Nyandior," daughter of Padior, is the name of a tribe-section.

B.

(Solo.)

Eye-Aiyan, aiyan, aiyan. Wengdien ci gau riam ci koriom

Aye wuot a wai.

Nongku ater-e, we Cie de Lou.

(Chorus.)

Un nin we-a (alternative, Un ros ben),

Aiyan aci gau riam ci koriom

Aye wunt a wai.

(Solo.)

Ye-Ran aca mioic ne bainde Ku kui mu-e,

Ci rau bain de un uoic.

(Chorus.)

Ca ut ngwang ne kersic. Aiyan aci gau riam ci koriom,

Aye wuot a wai.

(Chorus.)

Grasp the spear of the Daughter of Padior,

A spear for killing man,

(Solo.)

Vulture, why art thou not famished, as though

I had not gone (forth to fight)?

(Chorus.)

For thou sayest, I am famished, yea it is thou

My spear is followed by the kits.

My spear is followed by the vulture and the "cuor."

10

(Solo.) Yellow kine, yellow kine, yellow kine.

My cattle have trodden down the bent reeds like locusts,

(So that) the cattle-krasls blame me continually,

We have a quarrel, I and the Cic of Lou. (Chorus.)

The kraal that sleeps away (alternstive,

The kraal that refuses to come). Yellow kine have trodden down the bent

reeds like locusts,
(So that) the cattle-kraals blame me
continually.

(Solo.)

I have presented man with his priest

And lie eannot comprehend.

Man has failed to find his father's priest

(Chorus.)

I have threatened the kraal with evil.

Yellow kine have trodden down the bent reeds like locusts

(So that) the cattle-kraals blame me continually.

The inference of the first three lines, which recur as a refrain, is that Dengdit has blessed man with innumerable cattle, so that the grazing grounds in the marshes, whither the herds are taken in dry season, are not sufficient. The italicised syllables are of musical, not grammatical, value.

Dengdit, the "father" of man, speaks of Wal as his "priest."

DIET E'ARIE (SONGS OF ARIE).

These are accompanied by drums and dancing. The dancers merely jump in time with the drum, keeping the two feet close together and the whole body in a certain approved position. There is no particular order, apart from the dancers being grouped round the drums, which all face. There are frequent interludes in the dance, during which the drum, song, and jumping cease, and each man devotes himself to chanting his own ox-names and improvising his own praises.

Δ.

(Solo.)

Eye-An ye remdie awou puol Ca bain kong you eben-e

Weng yar awa! Atong ke yar ager.

(Chorus.)

Ca bain kong you oben,

Aiyandien e bain Adol-e. An cie dier e wei-e. An ci cien randien nyie.

Kedien luel aban kain d'apiou guor.

Ca nom lo dil ne wuotcie yeron.

Ya gam tong ku dol wuot a.

Ca tongdie thar akel ku ale te-

Ban kaindie guer enong ke luelku we ran.

(Solo.)

Eye-Kwalkuot remdie gam tong.

(Chorus.)

Ku na lui Aicie ke wo be rom ne Remlil.

Ye Nuer kat abi duk-e. Weng yar e Lualdit! Acan e dier e wei. (Solo.)

I am a host loosing forth sound.

I have forestalled every chief for first place.

White cow of my father!

It is like the straight-horned white one.

(Chorus.)

 have forestalled every chief for first place,

My yellow cow of chief Adol.

I fear not for life.

I am without a companion known.

The matter for me to discuss is that I will pay back the debt of my heart.

My head was dazed for my cattle-kraals are but two.

I determine on battle, and the cattle-

My battle I fought from midday until evening.

That I might pay back the debt for the matter that I and another discuss.

(Solo.)

Kwaikuot, my company, is determined on battle.

(Chorns.)

And if the White Man be absent we will meet at Remlil.

The fleeing Nuer will return (home).

White cow of Lualdil!

I did not fear for life.

Composed in 1914 by the men of Atet, one of the larger Bor clearings, on the occasion of the northern Bor Jieng being raided by the Nuer tribe. The raid was stemmed and turned by the warriors of Atet.

Adol, the chief of Atet.

Kwalkuot, one of the chief "age-fellowships" of Atet.

Remlil, one of the Atet cattle kraals.

Lualdit, chief ancestor of Adol's people.

The second line refers to Atet taking the lead in resisting the invader.

The "debt" refers to a long-standing fend between the Nuers and the northern sections of the Bor tribe.

Wut (plur. wuot), cattle-kraal, is used of (1) a herd; (2) the owners and herdsmen of a herd; (3) the permanent camps or kraals to which the herd goes in rotation. B.

(Solo.)

Eye-Deng e Col amei a toug-e.

(Chorus.)

Duona ber lo rir we ci thiang de dau.

Koin a tit, we bi wai liab.

(Solo.)

Eye-Wo ram wo yi, un e Kolok.

(Chorus.)

Wuot ya gwai elanghon;

Wuot ya mai tong.

Ne yin kuie aterdie ku ba ngo nyi?

(Solo.)

Deng e Col persists in a quarrel with me. (Chorus.)

Flee not entirely away like the "tiang" with its fawn.

Wait first for me, that we may mingle our spear hafts.

(Solo.)

We meet with thee, father of Kolok.

(Chorus.)

The cattle-kraals illtreat me from of old. The cattle-kraals persist in a quarrel with me.

If thou knowest not my fend, then what wilt thou know?

Sung by men of Gwala clearing, who are at enmity with Deng e Col, chief of Adol clearing.

Kolok, an ancestor of people of Adol.

DIET K'AMUK (SONGS OF ARUK).

These are accompanied by drums and dancing. The men are formed in single circular file round the drums, each man facing his neighbour's back. The women are on the outer side, and face towards the centre. All jump as before. At a certain change in the rhythm the men break from their circular line, and each dances with a female partner, by whom he has been previously selected. The partners dance (jump) facing and close to each other, but do not touch.

A .- AKDOTDIT.

(Solo.)

Moin d'Aman, yengo ye nyang koic-e?

(Chorus.)

Akuot thundie, yengo ye nyang koic e

Ca thuku bai ye nyang yi Jong e Garang.

Remdien de wun e Col e Nial. Yaka dai mioic, alet e wo.

Adorbain, ye mith mu ne yilee,

Ca cir kwe, ye Bolong de yuom-a.

Din e nyuie e tim nim ne weryou.

(Solo.)

Husband of Aman, why do you refuse people?

(Chorus.)

Aknot, my relative, why do you refuse people fish?

You have overlooked your relatives in refusing Jong e Garang.

My company of the kraal of Col e Nial, Hasten and cease not to make presents to him, lest we be abused.

Adorbain, you who retain food in your teeth.

You are like the "fish-eagle," Bolok of the bone.

The bird that sits on the tree tops beside the river.

The line, "Ca cir" is also used as a solo at times.

"Akuotdindie," my Akuotdit, is alternative for "Akuot thundie."

Composed by the people of Adol clearing (chief Col Maicar, also known as Col e Nial) about the year 1913.

A man named Garang Anyang, whose cattle-names are Akuotdit and Adorbain, had recently married an Adol girl named Aman. He churlishly refused to share his fish with Jong e Garang, a brother of Aman.

Line 5 is intended to be deeply sarcastic.

Line 6 is an insult. Jieng make a practice of carefully rinsing the mouth after food, and the words imply that Adorbain (Garang Anyang's cattle-name) is like the ox his name signifies, whose teeth are not cleansed after food.

Bolak is a name given to the fish-eagle.

B .- MATTANCIE (OF MATTENCIE).

(Solo.)

Ya-Maiyaneie-o, wok aci lat ricic.

(Chorus.)

Jal Abang kat ku nong ringdien de Lücl akucin ngo.

Guom keraic adi-ya?

Kuoi è lo wun de Lual.

(Solo.)

Va—An yen a nyircie lat ku pal erun-α.

Ya-An yen e duocie lat kn pal ervu-a.

(Chorus.)

Ater ster jamdie we yin. Ne yin ya wai cuat e Maicar re piny,

Ca ngo noie, baincie? Ater e Maiyan knoi alo wun de Lual. (Solo.)

My men of Maiyan, we have been abused for being afraid.

(Chorus.)

Abang takes to flight, and I have my flesh of Lucl to help me.

Why do I suffer evil?

Weeping has gone to Lual's kraal.

(Solo.)

I keep having my maidens abused, and forgive it for this year.

I keep having my boys abused and forgive it for this year.

(Chorus.)

My speech has a quarrel with thee. When I rebuke thee Maicar throws himself upon the ground,

"What have I done amiss, my chiefs?"
For a quarrel with Maiyan weeping goes
to Luars kraal.

Composed by the young men of Palek clearing in the year 1914, when the age-fellowship most to the fore was named "Maiyan" (yellow ox) or "Agok" (baboon). The occasion was a fight with a neighbouring clearing, Abang. The men of Abang fied with their cattle, and Maicar, their chief, when overtaken in the pursuit, threw himself on the ground crying abjectly, "Ca ago noic, baincie?" ("What have I done amiss, my chiefs?")

Lucl, ancestor of Palek. Luck, ancestor of Abeng.

ARCHIBALD SHAW.

REVIEWS.

The Northern Bantu: An Account of some Central African Tribes of the Uganda Protectorate. By John Roscoe, M.A., Rector of Ovington, Norfolk.

Formerly of the Church Missionary Society. Cambridge: University Press. 1915.

Dr. Roscoe has supplemented his monumental work on the Baganda with this account of several less known but very interesting tribes in the territories adjoining them. Though he modestly remarks that "the account which I have given of these "tribes, other than the Baganda, is fragmentary and incomplete; the short time "which I could devote to the study in my vacations precluded the possibility of a "thorough investigation," the ordinary reader may well be amused at the amount of information packed into these professedly desultory notes. The people included

in this survey are: the Banyoro, the Banyankole, the Bakene, the Bagesu, and the Basega; and some additional notes on the non-Bantu Bateso and "Kavirondo" (Jaluo) form an appendix.

Perhaps the most interesting description is that of the Bakene, a highly specialised race of lake-dwellers, found on Lake Kyoga and the adjacent waterways. They appear to be akin to the Basega, and their traditions indicate emigration from Busega, i.e., from the east or south-east. None of the clan-names given on p. 148 are to be found in the lists of Soga clans on pp. 205-7. But the names are only drawn from one small area near the River Mpologoma, and do not exhaust even that district. Three of the totems mentioned for the Bakene-the husk of millet, the guines-fowl, and the otter-also occur among the Basoga, but in the absence of further information it is impossible to say whether this implies any connection. It may be of interest to note that one of the Soga claus-Mugwano-has the same name as one of the thirteen Pokomo tribes on the Tana. But of course nothing can be made of an isolated point like this. The Banyoro and Banyankole have the following names in common-Basingo, Baitira, Bakimbiri, Basambo, and Batwa. The totems, however, are different, except, perhaps, in the case of the Baitira, whose second totem among the Banyoro is "a woman nursing a female child," while in Ankole they have as their totem "the human breasts-Mabere." The well-marked Hamitic strain in the pastoral clans of both Bunyoro and Ankole suggests comparison with the Galla, and many remarkable points of contact are brought out by Dr. Seligman (Journ. Roy. Anthr. Inst., XLIII, p. 651, &c.)

But there is no resemblance, so far as I can discover, in any of the clau-names (see list of Galla claus in Man, 1915, 10). Those of the Banyoro and Banyankole appear by their form to be Bantu, and may have been adopted in comparatively recent times. Clau names are frequently subject to modification. The Bantu Pokomo have Galla names for many of their claus, some of them co-existing with an older Bantu appellation. So do the (whether Hamitic or not) non-Bantu Wasanye. In both these cases the names seem to have been adopted by the subject race, and some of them are found among the Abyssinian Galla, e.g., Karar and Karayu, which, according to the Galla themselves, are two of the oldest claus.

The first legendary king of Bunyoro (p. 6), though his story, as here given, is but vague, recalls Kintu of Buganda, and also the Galia tradition that the ancestor of the Uta Laficho clan descended from the sky. I do not know whether it might also be connected with the Pokomo legend of Vere.

The chapter on the Bagesu of Mount Elgon deserves special attention, as they appear te represent a very primitive stage of Bantu culture, and little has hitherto been written about them beyond what is to be found in Mr. Purvis's Through Masaba to Mount Elgon. Like the Kikuyu, the Bagesu do not bury the dead. (Mr. Purvis, however, says that an infant or an old person is buried in the house, or just under the eaves, till the birth of the next child, when the bones are taken up and thrown out.) Like the Nandi, and the "Nyika" tribes of East Africa, they respect the hyena, though they will kill one which has seized a goat from the flock. No doubt the reason given by Dr. Roscoe for this respect (the connection of the hygens with the dead) is the true one, and the Giryama, who bury the dead in the ordinary way, have either inherited the cult from a period when this was not done, or borrowed it from some other tribe. Mr. Purvis notes that the hyenn "is not " classified in the language as other animals, but has received a name which puts it " on a level with persons." Gesu being about the most archaic Bantu language accessible to us, it is interesting to note the beginnings of a process which shows itself in different ways and to a varying extent in Ganda, Ila, Nyanja, Zulu-to mention no more-and has reached its conclusion in Swahili, where logic has so far triumphed over grammar that all names of animals are treated as belonging to the person-class.

Not least among the minor calamities entailed by the present disastrous war is the fact that it has prevented Dr. Roscos from continuing the inquiries for which he is so eminently fitted. A. WERNER.

China. Leong-Tao-Hobhouse.

Village and Town Life in China. By Y. K. Leong and L. K. Tao. With a Preface by L. T. Hobbouse.

A book about China by two Chinese who have been students of economics and social politics in London is of interest to many besides those whose attention has been given to the ancient civilisations of the East.

Each author is responsible for one portion of the book, Mr. Leong writing the chapters on "The Internal Working of a Chinese Village," whilst Mr. Tau discusses "Town Administration" and "The Popular Aspect of Chinese Buddhism." In the last-named subject we are taken considerably beyond the social aspect of Buddhism, but without regretting the excursion.

Of late years China has been-and still is-in the midst of changes which, in a Western country, would have involved repeated disorganisation of the national life. That this has not resulted is due to the extraordinary stability of the Chinese social organisation. The great mass of the people, wedded to the soil, are little affected by the superficial convulsions which dethrone an emperor or crown a president.

Mr. Leong gives us a brief and clear account of the organisation which makes a Chinese village "an autonomous unit," and he emphasizes the fact that, "in its " actual working, China is a huge republic within which there are myriads of petty " republies." The supreme importance of the family and the clan, united by reverence for common ancestors, is the key to the study of Chinese institutions, since the principle extends beyond the bounds of the village or the town, and becomes a theory of national government. It is part of Mr. Tao's task, in the book under review, to show how the existence of a hierarchy of officials, from the Emperor or President downwards, is compatible with the self-government that prevails. "It is as repre-" senting Heaven that the Emperor looks after the welfare of the people . . . " but, strangely enough, no theory of divine right has ever evolved from the " ingenious explanation of the heavenly duty of the mouarch." It appears that a president may represent Heaven nearly, but perhaps not quite, as well.

The Chinese are so far away from us, and so remote in race, language, and customs, that we are apt to judge them by their differences. In return, we are to them, or to some of them, Western barbarians-possibly even credited with Kulturand if they sometimes study our laws and customs, the conclusions they may draw are not necessarily flattering. It is, however, gratifying to know, on the authority of Mr. L. T. Hobhouse, that "English is becoming for them the language of education," and we may hope that their study of our institutions will help them to avert or mitigate that commercial industrialism which is "the doom of the modern world." Few Englishmen could write of their own country in Chinese, and we have the more reason to feel grataful to the authors of this very interesting volume for helping us to gain an understanding of the basis of an older civilisation than our own. H. S. H.

Egypt: Archæology.

Blackman. Les Temples immergés de la Nubie. The Temple of Bizeh. By Aylward M. Blackman. 4so, 72 pp., 42 Plates. 395. Cairo : Service des Antiquités. 1915.

This volume is another of the memorials of ruin by commercialism. The little

temple of Bizeh, like so much else of more value, has now been drowned by the Assuan dam. The removal of the temples to higher ground, which Sir John Aird was anxious to do without any profit to himself, was refused by the Government, and the world has for ever lost the only temple which was rich with original colouring.

The publication of the temples was entrusted to various scholars, and Mr. Blackman has treated of two other temples before the present volume. The whole of the sculptured scenes are described in detail, with the hieroglyphs. The few demotic and Greek graffite are discussed. Then follow indices of (1) the divinities, (2) the attributes of the divinities, (3) the forms of head-dress, and (4) a general index.

The plates are excellent, giving amply large figures of the whole of these sculptures. These are, however, due to the great German expedition, which completely photographed all the sculptures of Nubia, in anticipation of the loss due by drowning them. This work, which neither the Egyptian nor the British rulers would undertake, is part of that help to science which will redeem Germany in the eyes of the future, in contrast to the ignoring of the higher side of life by our own rulers.

The peculiar feature of this temple was the insertion of a parabolic arch of small blocks, beneath a great lintel which still remains unbroken. The purpose of this was to transform the pagan aspect of monolithic building into the style of the humbler brick building of a church. When the sculptures were duly plastered and whitewashed, those who entered the archway, resting on late Roman capitals, would never be reminded that the building was due to another faith. This is, then, curious evidence of the asthetic sense of connection between architecture and belief in the Egyptian mind.

W. M. F. P.

Egypt: Mythology.

Spence.

Myths and Legends of Ancient Egypt. By Lewis Spence. London: George G. Harrap & Co. 1915.

The author, who is best known for his studies on American mythology, takes pains to state that he has long devoted special attention to the religion of Egypt. His chapters include Exploration, History, Customs; the Priesthood, Mysteries, and Temples; the Cult of Osiris, the Great Gods, Egyptian Literature, Magic, Foreign and Animal Gods. He rightly lays stress on the importance of the Local Gods in the evolution of Egyptian religion. An interesting chapter is devoted to a criticism of the views of Dr. Budge, who believes that the religion was not based on Totemism. Mr. Spence assumes that "Bast" was originally a cat totem, "Sebek" a crocodile, "Ra" and "Horus" hawks, "Thoth" an ibis, "Anubis" a jackal. It is to be regretted that the scheme of the book did not allow a more detailed exposition of these theories. In fact, the chief complaint to be made against the book is that it attempts to cover too much ground. But it will serve as an useful introduction to the study of Egyptian cults and mythology. It is well illustrated, and the coloured drawings by Miss Evylyn Paul are decidedly striking. Scholars, however, will prefer to depend upon reproductious from the abundant material supplied by the monuments. W. CROOKE.

Anthropology.

Balfour.

Theism and Humanism. By Arthur James Balfour. Loudon: Hodder and Stoughton. 1913. 10s. 6d, net.

Mr. Ballour's Gifford lectures for 1914 will be read by us all with pleasure and profit, quite apart from their bearing on the particular subject of anthropology.

Thus, speaking for myself, as one must do in regard to a matter of taste, I should put Mr. Balfour first among living writers of philosophic English; and there are many things said in the course of this book that in point of expression as applied to thought of the speculative type are a joy for ever. Here, however, the reviewer's duty is to confine himself to the purely anthropological aspect of Mr. Balfour's defence of theism. But, at first sight, such a restriction of scope seems to leave one with very little to say. For Mr. Balfour's theme is not the argument from consent. He does not argue that, because every savage has his Mumbo Jumbo, there must be something in what the civilised churches teach. His point is quite different. He is out against naturalism and the agnosticism that it brings in its train. With all respect for the man who will not be put off with dreams and inventions, however flattering to the spirit, but insists on looking facts in the face in the laterest of truth for truth's sake, he contends that such a man escapes his own notice in basing his whole rationalistic position on God; since God as the supreme value that embraces truth as an end in itself is presupposed in the effort to make good scientific truth at all costs. This, then, is his main thesis—that the highest values which life bids us realise, seathetic, moral, intellectual, cannot be justified except by regarding them. not as the effects of natural processes, but rather as their causes—as manifestations of a helping, guiding force that somehow conditions human life by way of a providence and an inspiration. Yet because there is a "somehow" about it-because the way in which the force works in our lives is not wholly clear to us, and because it is apprehended in a partial and one-sided way, namely, in its relation to human welfare -Mr. Balfour terms his standpoint "Humanism."

For the rest, he tries to show, earrying the war into the enemy's camp, that naturalistic explanations fail to justify these highest values. They make them out to be mere by-products of evolution-natural values that have gone out of their way to become "denaturalised," as Nietzsche says. Just in so far as anthropologists may have been tempted to say the same thing about human feelings and judgments about beauty, goodness, and truth, do they come within the range of Mr. Balfour's strictures. But do representative authropologists take that view concerning the first principles of human art, or conduct, or science? At any rate, Mr. Balfour does not try to bring it home to any of them. His concern is rather with the biologists, and, it would seem, mainly the biologists of a past generation whose naturalism hardly survived the nineteenth century as a fighting faith. To-day there is no longer any marked tendency on the part of biologists-or at any rate on the part of those anthropologists who accept a more or lass exclusively biological standpoint-to preach any sort of dogma, positive or negative. Their present policy is that of "cultivating one's garden"-of working from certain strictly limited presuppositions, leaving it to the philosopher to bring the results so reached into harmony with the results obtainable from other fields and by complementary methods.

Mr. Balfour does not say very definitely whether he would acquiesce in a science which forswere philosophy altogether—which, for instance, postulated determinism as a working principle, while fully allowing that it might be found to break down when re-examined in the light of the facts of life as a whole. It may be guthered, however, from some casual remarks of his that he would prefer even a purely scientific investigation to start from an overt philosophy, since it cannot but be secretly sustained by some belief about the universe. Now doubtless it is true that, while professing to do without a philosophy, science is in danger of creeting this very cautiousness into a philosophy of indifference, and of so becoming agnostic in the worst sense of the word. Science, however, can reply on its own behalf that a certain amount of scepticism is healthy, becoming dangerous only when it becomes depressing to the natural activities; and that its severest critics cannot accuse

science of being inactive. By comparison, it is philosophy that is inactive. Further, science might ask Mr. Balfour whether his own humanism is not suspiciously like, even if not directly derived from, the prevailing attitude of science towards ultimate questions. Does he not, in effect, postulate theism in so far as it "works" in the department of human values? Be this as it may, Mr. Balfour will find, among the present generation of scientific thinkers, many who will be in sympathy with his general position, whether he in his turn be fully in sympathy with theirs or not.

R. R. MARETT.

England: Archæology.

Hughes.

Notes on the Fenland. By Professor T. McKenny Hughes. With A Description of the Shippen Man. By Professor Alexander Macalister. Cambridge University Press. 1915. Pp. 35. Price 6d.

The Gravels of East Anglia. By Professor T. McKenny Hugbes. Cambridge University Press. Pp. 58. Price 1s.

These two brochures, which have been issued by Professor McKenny Hughes in so convenient a form and at so reasonable a price, are complementary, both of them dealing with the order, the age, and the fauna of the deposits found in the lower or estuarine part of the submerged valley of the Great Ouse. The first is chiefly devoted to the deposits of Fenland which contain pent—here given the name of "turbiferous series." The second is a history of the underlying older deposits of sand and gravel (areniferous series), boulder clay, and older loam deposits—belonging to Pleistocene and Pliocene Ages.

Professor Alexander Macalister contributes a description of the skull and skeleton of a man found at the base of the turbiferous series—on a farm at Shippea Hill, three miles to the east of Littleport. "In the base of the peat, about 4 inches " above the buttery clay, a human skeleton was found bunched up and crowded " into a small space, less than 2 feet square, as if the body had settled down " vertically."

When the discovery was first announced the remains were described by Professor McKenny Hughes as those of a "Man of Neanderthal Type" (Nature, 1911, Vol. 89, p. 114), a description which met with some degree of criticism at the time. Professor Macalister regards the skull—which is short and wide, with strongly developed cyclrow ridges—as characteristic of the men who appeared in England for the first time during the Bronze Age. On the evidence produced by the geologist and anatomist we may presume that the "Shippea man" was an East Anglian of the Bronze period. In our pages (Man, 1911, S5) Dr. W. L. H. Duckworth has described nine human skulls from the turbiferous series; three of the nine were brachycephalic

Social Psychology.

McDougall.

An Introduction to Social Psychology. By Wm. McDougall, F.R.S. 41 Ninth edition. 1915. xvii + 420 pp. Methuen & Co.

Mr. McDougall's luminous exposition of the workings of the instinctive processes of the human mind has carned a well-deserved popularity for his work on Social Psychology, which has now reached its ninth edition. The author has added to the eighth edition a chapter on the sex instinct. He gives a clear account of modern theories of sexual development and of the importance of the sex instinct in social life, and devotes much attention to the doctrines of Professor Freud and his school. It is disappointing to find that so able and acute a psychologist as Mr. McDougall has allowed the chapters on Social Psychology proper (X to XV, and more especially XI and XIII) to remain unaltered. In Chapter XI, "The Instinct of Pugnacity," Mr. McDougall insists upon the importance of pugnacity as a factor in the development of human society, and illustrates his argument by a sketch of the fighting tendencies of the tribes of Borneo (280-288 et seq.). But, in the work which they have written upon The Pagan Tribes of Borneo, Dr. Hose and Mr. McDougall elaborate a theory which is in direct conflict with the opinion expressed by Mr. McDougall in the work under review. (Cf. Vol. I, pp. 158, 159, 190; Vol. II, pp. 177-8, 180, 182, 183, 185, 187, 193, 231, 243-4.) Mr. McDougall also appears to be pursuing two contradictory lines of thought when he treats of the instinctive basis of religion, for the whole trend of the argument of Chapter XIII seems strangely at variance with the statements of Messrs. Hose and McDougall in Vol. II, pp. 221-222, of The Pagan Tribes.

W. J. PERRY.

India: Archæology.

Delhi Museum of Archaeology. Loan Exhibition of Antiquities, Coronation Durbar, 1911. Archaeological Survey of India.

This entalogue contains a selection of the principal exhibits at the Coronation Durbar Exhibition, fully illustrated with 84 plates. The most important part of the collection is a series of pictures belonging to private persons in India, many of them ruling chiefs. This collection is of great value, as the majority of these will not be available again for public exhibition. Most of them are portraits, and naturally they vary greatly in historical and artistic importance. Those belonging to the period of Akbar and Jahangir are in every respect the most notable. Special attention may be drawn to Plate XLL representing Jahangir as a prince drinking at a well, and to Plate XXXVIII(a) (belonging to the Maharaja of Alwar) in which the same emperor is seen showing himself to the people from the "jharoka" on the walls of the fort at Agra.

M. L. D.

ANTHROPOLOGICAL NOTE.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE. 43

(Donor indicated in parentheses.)

The Mythology of all Races. Vol. IX, "Oceanic." By Roland B. Dixon, Ph.D. 9\(^3\) × 6\(^1\). 364 pp. 24 Plates. S Illustrations in text, and Map. Marshall Jones Co., Boston. 30s. net. (The Publishers.)

A Sechuana Reader. By D. Jones, M.A., and S. T. Plantje. 7 ± × 5. 45 pp. Hodder & Stoughton. 3s. net. (The Publishers.)

Questionnaire, Egyptian Archwology and Anthropology. By E. S. Thomas. 61 × 42. 18 pp. (The Author.)

Annual Report of the Archaeological Survey of India. Part I, 1914-15. By Sir John Marshall, Kt., C.I.E. 13 × 10\frac{1}{4}. 48 pp. 20 Plates. Government Printing, India. 3s. (Director-General of Archaeology.) PLATE D. MAN, APRIL, 1917.



KALABAHI CEREMONIAL PADDLE, (CRVERSE.)

KALABARI WOODEN MASK.

CEREMONIAL PADDLE AND WOODEN MASK OF THE KALABARI, SOUTHERN NIGERIA.

ORIGINAL ARTICLES.

Africa, West.

With Plate D.

Balfour.

Ceremonial Paddle of the Kalabari of Southern Nigeria.

Henry Balfour, M.A.

3y 44

Among the specimens comprised in the splendid ethnological collection recently brought home by Mr. P. Amaury Talbot from Southern Nigeria, is a large carved and painted ceremonial paddle, which is worthy of special record. I saw this specimen in Mr. Talbot's private museum at his country house, and he generously offered to present it to the Pitt Rivers Museum at Oxford, as offer which I gladly accepted. Not only is the specimen possibly unique, but it is the sole remaining relic of a once famous Juju, all the other associated cult-objects having been destroyed during the iconoclastic campaign instigated by the self-elected pseudo-prophet who called himself Elijah II, and whose fanatical movement started in December 1915.*

This paddle-shaped symbolic object belonged to the Kalabari (or Awome) people, in the Degema division of Southern Nigeria (the district lying between the coast and the lower reaches of the Niger proper). The main population of the Degema division is Ibo, but the Kalabari form a considerable element, occupying in the main a position to the south of the Ibo. Mr. Talbot has informed me that the paddle formed part of the cult-paraphernalia of the dominant Ifawkaw (Fouché) juju named Amaningiu (the serpent juju). The precise function and symbolic significance of the object are not yet determined, but it is hoped that Mr. Talbot may yet be able to shed further light upon this interesting specimen.

The carving is in bold relief, grotesome in design, and somewhat crudely The details are elaborately picked out and emphasised with the help of a variety of colours (black, white, blue, pink, red, and yellow-ochre), and the whole effect is very striking, barbarie, and effective. The general style is characteristic of Kalabari workmanship. The human or humanised head at the top of the loom (Fig. 1), wearing a kind of tall hat and twisted side-locks, is said to represent the Serpent juju, Amaningin. The head is repeated, Janus-like, on the buck. In the centre of the loom is snother carving (also with its counterpart on the reverse), which is said to typify the Hippopotamus spirit. An identical rendering of this theme is seen in the Kalabari wooden mask from Abonnema, shown in Fig. 3, in which are well seen the long, stont tusks characterising these renderings of the hippopotamus, associated with general anthropomorphic features. This mask, which is carved from the solid wood, and measures 16 inches by 8 inches, was not worn over the face, but surmounted a head-dress which was worn in ceremonial plays, in which it represented the hippopotamus water spirit. The carved details are exactly similar to those of the carving on the paddle. This specimen was also given by Mr. Talbot to the Pitt Rivers Museum.

The blade of the paddle exhibits on the obverse (Fig. 1) relief carvings of a pair of human figures wearing ornamental head-gear; below them are two snakes tightly coiled. Conventional losenge-shaped figures, and, at the terminal point, a radiate coronoid design, complete the decoration. On the reverse side of the blade (Fig. 2) the treatment is similar, though varying in detail; a pair of human heads facing opposite directions, a pair of coiled snakes (as on the obverse), a pair of flying birds, with a "filling" of losenge designs, scalene triangles, and a terminal of the same form as on the obverse. The total length of the paddle is just under 5 feet 4 inches; the blade measures 20 inches by 13½ inches.

The wholesale destruction of interesting cult-objects by the functical adherents of "Elijah II" has robbed ethnologists of a vast amount of valuable material, which can never be replaced; and in view of the holocaust which characterised the raids of the "prophet," it is the more gratifying that Mr. Talbot by his promptness and energy was able to researe as much as he has done. By his timely intervention and generosity the British Museum and the Oxford Museum have acquired a number of HENRY BALFOUR. valuable accessions.

Punjab.

Rose.

By H. A. Muhammadan Betrothal Observances in the Punjab. Rose.

SECTION L.—TERRINGLOGT.

Among Muhammalans "betrothal" is known as mangewä, mangan, mangan (and other forms of that word," which literally means "asking" or "begging"). It is also called zagai, especially in the south-cast, and karmai. Another term is copså, which literally means the present or token consisting of seven dried dates and various other things sent by a (Hindu) girl's father to his prospective son-in-law at or before the betrothal. It corresponds to the shagent among the higher castes. e.g. in Hoshiarpur. The Arabic word nistrat is also used, chiefly in the towns. Another common term is vātta or vātā, which has a somewhat derogatory meaning, so that note deno means to give a girl in marriage, an admission of inferiority in status. The bridegroom is styled mangedar or mangetar, a term also applied to a betrothed girl, while bendha is used in the south-east. In the north-east he is called dalo, or dulha, or naushah, nausho, nausa, or mandho being variant forms of the latter word, and in Gujrānwālā lārā is also used. In the Talagang tahsil of Jhelum he is called nudba and his bride is buri, literally a girl or a virgin. In the south-west ghot is in common use.

The bride is correspondingly bendhani, duthan, or hear in the south-west, and after she is married nodh or buhū. The latter term means literally son's wife,

In the Pashto of Peshawar bethothal is called koyidan. The bridegroom is dalled changhal and the bride changhala. During the days of marriage the changhal and chunghalā are respectively called khāwand and nāwi,

The boy's father is particularly, and the boy's kinsmen are generally, called putreta. Similarly the girl's father or party is dheta.

SECTION 2 .- PRELIMINABLES IN BETHOTHALS.

In Arabia, it is said, marriage is usually adult, and it is not regarded as indecent that the bridegroom should see his future wife, but the seclusion of women in India renders this impossible, at least among the better classes. In consequence a mashshata or go-between is often employed to spy on the girl and report on her looks, etc., to the boy's people. These go-betweens assume various disguises, such as cloth-sellers, in order to obtain access to the girl's house, while, on the other hand, a girl is not infrequently substituted for the one seen and reported on by the go-between. Unpleasantness not unnaturally frequently results from such a deception. In theory Muhammadan law attaches great importance to mutual consent in marriage, but in India the practice is very often opposed to allowing even grown-up girls to express any opinion on a proposed betrothal. In fact, among the Muhammadans of Delhi there is a custom of pre-natal betrothal which is called thikri hi mang. ** because, if a girl be born according to anticipation, the boy's mother drops a rupee into the girl baby's bath or mixes sugar candy in the ghatti given to her, as an earnest

^{*} E.g. amageya in the Rajanpur tabail of Dem Ghāzi Khān.

[†] Fr. kvyww, "a relation by marriage,"

[†] Or shagen, lit. "an omen."

[§] Mangenda, fem. wangendi is also used.

This word appears to mean "new king."

See Maya Singh's Panjabi Dictionary, s.r. ** Fr. thikrd, an carthen vessel. Ming, asking.

of the betrethal contract this ratified. In Rohtak a boy's mother or any near kinswoman may drop a rupee into the vessel used by a midwife, and by so doing apparently bespeaks the new-born girl for her son. The betrothal is there and then announced and congratulations are exchanged.

Contrary to the usual practice amongst Hindus, the proposal among Muhammadans comes almost invariably from the boy's side. The term bâtânâ-bât-jânâ, to propose, is used when negotiations are opened by the boy's people. When both sides are satisfied as to the suitability of the match a day is fixed "for sweetening the mouth" (wānh mithā harne hā din), and on that day a number of women, with a few men of the boy's family, go to the girl's house to perform the betrothal rites." In the Sangrūr tabsīl of Jīnd the request by the boy's father is called dhuk and he visits the girl's father in the evening. The dwā-i-khair is then observed, the senior member of the boy's party commencing the prayer.

In Dera Ghāzī Khān the negotiations which precede a betrothal are called samāl or "request," and may take place a month or more before the betrothal is solemnised.

The negotiations are, however, not infrequently opened by the girl's people among the rural classes who are converts from Hindnian. Thus among the Meos of Gurgaon the girl's party first visits the boy's father, and reaches his house on the evening of an auspicious day in the lunar month. If they find the boy to their liking they are feasted, after giving a rupee each to the boy, his father, brother, father's sister, and his mirāsī and barber. The party is also feasted on the second and third days, after which it sets out for its home, giving the boy's parents Rs. 11 or 22 as a farewell gift. Of this sum a rupee is left in the vessel in which it was presented; the barber and wirāsī take one rupee and the infinoe is given to the poor. The girl's father in turn gives a rupee to the boy's father. This is called wilāp. Among other Muhamumalaus the observances vary. A ring or two is often sent to the boy, with other presents, and the tings are put on by the boy amongst his assembled kinsmen.† A ring is often presented in sugar, and the kinsmen feasted with more or less ceremony.

When such a negotiation is initiated by the girl's father certain special observances may occur. Thus in Sialkot a mirāsi, barber, or even a Brahman, is sent to the putrets or boy's father, and when he reaches his house a little oil is dropped on the threshold before he enters it. This observance is called tel dalua. The putreta's lagis also assemble, and the dheta's lagi is given some sagar in a plate, from which he takes a little in his mouth. This observance is called munh juthlawna or juthālnā or juthalma = to defile : P.D., p. 522. Then the lāgī is given khichri. He cats some of it and drops a rupce and some copper coins in the plate. These are distributed among the putreta's lagis. Next day the boy's kinsmen feast the lagt on rice and sugar or mutton and bread. At the zukr prayer carpets are spread in the hoy's house and the whole brotherhood assemble. The boy is seated in front of the lagi, who gives him from Re. 1 to Rs. 25 as well as a date or sugar candy to eat. Then he exchanges congratulations with them and observes the niyat khair. After this all present congratulate the boy's father. The dheta's lagi presents a sum varying from Re. 1 to Rs. 11 for distribution among the boy's kamins. The boy's people also distribute tapāsās of sugar among the people on this occasion. Some well-to-do Jāt and Rājput families also send a camel, a horse, and ornaments such as bangles or butkiāu; for the boy's mother. This is called tikkā bhejnā. On

^{*} This paragraph applies to Delhi city.

[†] The barber is given rice, gkl, and sugar, but nothing containing salt should be offered him on this occasion.

[‡] Budki, a gold coin worth Rs. 5 : P.D., p. 168.

this occasion drums, &c., are benten in the boy's father's house. The persons present on the occasion give a rupee each to the boy's father to be given to the lägi. On the lägi's departure the boy's father gives them as wadāigi from Rs. 4 to Rs. 8, which is divided into four shares, three being given to the lägis named above and the fourth to the lägi of the maternal relatives. No mention is made on this occasion

regarding the date of the wedding.

A very few wealthy families in Gujrāuwālā also observe this custom of sending a tikkā, but in a slightly different way. It consists in sending a barbar, a mīrāsī, a Brahman, and a tailor, with a horse, a camel, clothes for the boy and his parents, a gold finger-ring for the boy, Rs. 21 in cash, five lumps of caudy, and some dried dates. On the arrival of the lagis named, the boy's father invites his kinsfolk to his house and displays the gifts mentioned. Congratulations are then exchanged and tapāshās distributed among those present. Rs. 2 to 5 are given to each of the bride's lagis, and they are then sent back. Various intermediaries are employed in the preliminary negotiation. Thus in the Bhakkar tahsīl of Mīānwāli, on the Indus, a Sayyid, manlavi, faqir, or any respectable elder, is sent to the girl's father by the boy's to make a request (dhuknā) for her hand. If it is meant to accept it an ambiguous answer is given until the proposal has been repeated four or five times. Meanwhile the boy's kinswomen begin visiting the girl's family with presents, and finally the offer is accepted provided the parties be related or the boy's father promises compensation or a girl in exchange. In the Leia tahsil of this district the leading families, almost all Sayyids and dominant Baloch, the first step to take when a boy reaches a marrying age is to send a dhuk or embassy of picked members of the family to the girl's father. His refusal will be definite, not to say abrupt, but his acceptance estensibly reluctant and well-considered. The families now begin to associate, but the girl veils herself from all the males of her intended husband's family.

But in Hazāra generally no intermediary is employed save the barber, and he is not called when the parties belong to the same brotherhood, for then the womenfolk arrange matters. In Peshawar an elderly kinswoman of the boy acts as dalāla, or go-between, and it is only when she has succeeded in securing a bride for him that a jirga of Sayyids and ulmās is sent to the girl's parents. If they are wealthy they put off the jirga twice or thrice before finally consenting.

Even after these preliminary negotiations the final betrothal does not always take place at once. Thus in Bhakkur and Leia a few days after the negotiations have closed the boy's people go to the girl's house and formally present her father with a few gold or silver ornaments for her use, and after the dua-i-khair has been repeated distribute sweetstoff. This observance is called nishani, or "token." In Blakker the boy's father is said to place a ring on her finger and a bhockhan or sheet on her head, and this is called mishāni. The betrothal follows a month or two later. But among the Utmāozais in Hazāra the nishāni only precedes the betrothal by a couple of days, and is observed in rather a curious way : the boy's party takes presents to the girl's village. After nightfall they are invited to her house, and the mirasi brings a plate, into which the boy's father puts the ornaments. Of these the girl's father takes two or three by way of nishant, and then the betrothal is announced, the dwa-i-khair recited, and congratulations exchanged. The mirasi's fee for this service varies from Rs. 4 to 8, twice that of the barber, so the part he plays must be regarded as important. The boy's teacher gets from Rs. 1 to 5. Among the Jaduns in this district the nishāni appears to be the betrothal itself, for when a match has been arranged the boy's father sends food-called jirga ki roff-to the girl's and then pays a visit (jirga), which must be made on a Monday or a Friday, and by night, to her house. The jurga or visitors are then

fed, and a barber presents sugar in a plate to one of its members. He drops Rs. 30, 50, or whatever the girl's father demands, into it, and the barber carries it into the house. The girl's father accepts part of the money and returns the rest. The duā-i-khair is then recited, and a rupee* given to the mosque. A barber then gives the boy's kinsmen in a cup (katora), into which they drop a rupee. In another cup mehndi is brought, and this is applied to each man by way of nishānā. Another rupee is dropped into this cup also. Within a week of the jirga's departure, some of the boy's kinsmen take a sweetmeat called pakwān to the girl's house, where they spend the night. The return visit is called wilnī. At the next Id the boy's parents send the girl clothes and uncooked food, with an ornament if well-to-do, and similar presents are sent on every Id and Shab Barāt until the wedding.

In Peshäwar also the mishāmt is the mātā or betrothal. When the last jirga has obtained a definite promise of the girl, a body of the boy's kinsmen go to the girl's house, and take one to seven ornaments with them as mishāmī. When they arrive they are seated on a carpet, and the barber brings a patnos into which each puts some money. The ornaments, too, are put in, and then the patnos is sent inside to the girl's womenfolk. The amount of money agreed upon and the mishāmī are kept, and the patnos with the balance sent out again to the boy's kinsmen. The betrothal is completed by the father paying certain fees to the barber, the imām of the mosque, and the mutrib. On the third day after this the girl's parents send the boy a ring and a suit of clothes—a gift called jorā—and at each fair and festival his parents send her presents till the wedding.

In the Utmannama Tappa of Peshawar the suskant observance appears in all essentials under the name of that-the plate in which the ornaments for the girl are placed. The thal ceremony concludes with the return, it is said, of all the ornaments and cash offered. However this may be, at its close each person present drinks some sharbat and puts some mehadi on his bands-an observation called ghast, which is held to make the betrothal bluding. The third day after the betrothal the girl's kinswomen go to the boy's house for two or three days, and when they depart his parents give his future mother-in-law and sister-in-law a rapee each "by way of porono." This observance is called channa arta. Again, two or three days later the bridegroom, with two or three friends and females, goes by night to his father-in-law's house taking with him sweetments and cash Rs. 2 to 10. The party are feasted and then the bridegroom puts the money into the plate and sends it with the sweetments to his mother-in-law as soldmans. Shortly afterwards the bride's parents come, flinging jets at him, and sprinkle scented water over him. This is called ubā achwal. At each fair and festival after these ceremonies the bridegroom sends gold or silver ornaments for the bride.

In the Chakwal tahail of Jhelum a very similar custom exists. To ratify the understanding already strived at, the boy's father goes one day to the girl's and presents him with sweetstuff and Rs. 21 in each in the presence of her brotherhood. Her father accepts from Re. 1 to Rs. 5, rarely taking the whole, and coloured water is sprinkled over the whole of the boy's party. The duā-i-khair is recited at night, and they return next day. This is called niskānī rakhnā. The boy does not accompany the party on this occasion. On the first Id after it, the boy's father sends presents for the girl, and if he is well-to-do he sends clothes to her mother and sister as well—when the gift would be called dhāt tewar denā, "to gift 3 " (literally $2\frac{1}{2}$) sets of clothes." The fathers may also exchange gifts of clothes, but if the bride's parents only receive garments for her they need only give sweetmeats in return. If this gift is brought by a barber the girl's father gives him a rupec, a turban, and a kurta—an observance called kapye denā. At the next Id

clothes, &c., are only sent to the girl. In Talagang tabsil the wishaut is merely a present of Rs. 5 in cash and as many page of sugar made, it seems, at betrothal, So, too, in Haripur taheil, in Hazāra, it is an ornament given to the girl at the mangere. Finally, in Hoshiārpur, at least among the Pathāns, we find the nishānā following the solemn betrothal, at which a maxlavi invokes the niyat khair twice and the girl's father gives dried dates and sugar to the boy's party by way of shugun. The contract having thus become irrevocable, some date of the lunar month is fixed for the nishani, which merely consists in the interchange of presents, feeing of lugis, and the payment by the girl's father of sufficient money to buy the boy a ring."

H. A. ROSE.

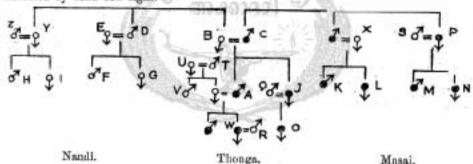
African Relationships.

Seligman.

The Relationship Systems of the Nandi Masai and Thonga. By Brenda Z. Seligman.

The following notes on the relationship systems of the Though, Nandl, and Masai are based upon the published works of M. H. Junod† and Mr. H. C. Hollis. The comparison shows some striking points of resemblance, which can be explained by the prevalence among all three peoples of a particular type of marriage, apparently dependent on the payment of the bride price. Among the Thonga this marriage, i.e., with the wife's brother's daughter, takes place at the present day. We have no record of it among the Nandi or Masal, yet so close is the correspondence in the use of the relationship-terms involved, that I can only conclude that if this marriage does not take place at the present day it must once have been the custom,

Those persons to whom A can trace relationship through the father are indicated by solid sex signs.



A calls D, E, F, imamet

A calls D and F malume or A calls D and F of-apre kokwana.

D calls A lakwet (son)

D calls A ntukulu (grandson)

A calls B and G kamet

A calls B and G mamana (mother).

(mother).

A calls H, I, J, K, L, tupchet A calls H, I, J, K, L, makwabu.

A calls M weirit-ap-chepto

A calls N. O. lakwet-aptaptel.

In Leia a few days after the betrothal a date is fixed and on it the son's party, with some relations and friends, go to the girl's house, and before the assembly present her father with a few affiver or gold ornaments for her personal use. After saying the dus khair and distributing sweetment they return home. This is called wishord, lit. "a mark of securing union."

[†] The Life of a South African Tribe. Neuchatel, 1912.

¹ The Nazati: also, "Note on the Massi System of Relationship and other matters connected therewith." Journ. Roy. Anthr. Just., Vol. 21, p. 478.

[§] Juned. Op. cit., pp. 232-233.

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Nandi.	Thonga.	Massa.

A calls P senget	A calls P rarana	
A calls Q, R, S, sandit	A calls Q, S, mukonwana	A calls Q, R, S, ol-aputani
A calls T, V, kap-yukoiit	A calls E nsati (wife)	
C calls X pamurto	E calls A spata (busband)	C calls X e-sindani e-anyit
X calls C pamurto	C calls elder brothers and sisters of wife makenmana.	X calls C o-sindani le-anyit
C calls Y pumurto	C calls E and her elder brothers and sisters mu- koñwana.	C calls Y c-sindam c-anyu
C calls Z lemenyit	A calls T and U mukonwana C calls F mukonwana or namu G calls C nhata (husband)	

NANDI.—The relationship system of the Nandi has certain classificatory features, though the father's sister is not classed with the mother, but has an individual term, and the mother's brother's daughter is called "mother." Mr. Hollis has not made any remark on this point, but by comparing the Nandi system with that of the Thouga, who also call the mother's brother's daughter "mother," all the other incongruities in the relationship system of the Nandi become perfectly natural consequences of the marriage to which I refer. Age classes with sexual communism between certain groups are far more clearly marked among the Nandi and Masai than among the Thouga, so it is the more surprising to find this discet exception to the rule that a man marries into the women's age class corresponding to his own. Yet, on this hypothesis, seven terms among the Nandi, and six among the Masai, which otherwise appear incongruous, are explained. Thus, if C has the right to marry G, his wife's brother's daughter, then—

(1) A (son of C) calls G, his mother's brother's daughter, kamet, "mother."

(2) A calls his mother's brother D, insenset, but in consequence of his father's marriage to G, F becomes his maternal uncle, hence—

A calls his mother's brother's son, F, imamet, the same term that he applies to F's father.

(3) A calls his father's sister's daughter, N, and his own sister's daughter, O, by the same term, lakwet-ap-taptel, because S, the husband of his father's sister, has the right to marry his wife's brother's daughter, J, who is A's own sister. Consequently, the daughter of P and the daughter of J bear equal relationship to A.

(4) C calls his wife's father and his wife's brother by the same term, kôp-yukoiit; the brother of his first wife is the father of his second wife.

(5) A calls his father's sister's husband, S, by the same term as he calls his own sister's husband, Q, because S has a right to marry his wife's brother's daughter, J, who is A's sister.

(6) Thus it is not surprising to find an individual term for father's sister, though the father's brother is called "father" and the mother's sister "mother."

(7) A calls his own daughter's husband, R, by the same term as his sister's husband, Q, because Q has a right to marry his wife's brother's daughter, W.

(8) The other terms are such as would be expected in a classificatory system.

The system is, however, unusually rich in terms for relations by marriage; these may be dependent upon the payment of the bride price, and I suggest that those three relationships which are called by the same term, pamurto (wife's sister,

husband's brother, and brother's wife), are used between people whose relationships are untampered by this consideration.

Monsieur Junod has shown how the right to marry a wife's brother's daughter has arisen out of the custom of paying lobela (bride price) among the Thonga. According to M. Junod's account a man had the right to his wife's brother's wife, i.e., that one whom his wife's brother bought with the lobela that he received for his sister. This right would only be exercised in case of barrenness, death, or other breaking of the first marriage. This woman, the wife's brother's wife, is called the great makeeman, the term wakeeman being applied to mother-in-law, and she is respected and avoided as a mother-in-law, and this respect and avoidance is even extended to har elder brothers and sisters:—

"One of the explanations (I will not say it is the only possible one), is this: This woman having been obtained with my oxen, there is a relation of dependency between her family and mine. Mboza says: 'Should my home he disturbed by 'quarrels, should my wife, Nsabula, lasve me and run away to her parents, or should she die without children, I shall go and claim my oxen. . . . But the 'oxen have been employed to buy a wife for my brother-in-law, Maphunga for Mahangale. If Gogwe has no other means at his disposal he must separate the 'pair, Maphunga-Mahangale, unneel their marriage, send Maphunga home, and claim 'the money from her parents. Or I might myself take Maphanga as my wife, and 'in either of these cases the marriage, Maphunga-Mahangale will be annulled.'"

It is very curious that here we have a woman treated as mother-in-law by a man who has a right to marry her. But before he could marry her he must "kill" the relationship. "Then Mboza fetches a goat and a most curious coremony takes "place, . . . the rite of killing bubokwana or shikekwana, the aim being to "kill a certain kind of relationship which must be replaced by another."

Monsieur Junod shows that, as a matter of fact, the breaking of her first marriage so that she may marry her husband's sister's husband is so inconvenient that she usually gives her daughter to him instead, and thus she becomes his actual mother-in-law.

On comparing the terms used by the Thonga and Naudi we see that they correspond in a striking manner. Both systems have an individual term for father's sister; in both the mother's brother's son is called by the same term as the mother's brother, while the mother's brother's daughter is called "mother," and in both systems the father's sister's husband is called by the same term as the sister's husband.

Among the Thonga the logical consequences of this marriage are carried further ; I

† Op. cit., p. 283.

† The Thonga relationship system is further complicated by the right of a man to inherit his mother's brother's widow, whom he calls "wife" during her husband's lifetime. She also calls him "husband"; he is on the most friendly terms with her but he is not allowed to cohabit with her. It might be due to this inheritance or former right of access to the mother's brother's wife that the word for sister's son is the same as grandson among the Thonga. If A marry D, the wife of his mother's brother, then E, his sister's son, might perhaps call him grandfasher, as he calls C.

^{*} Op. cit., p. 282. The diagram shows the relationship of the people referred to:

a man calls his wife's brother's son by the same term as his brother-in-law (C calls F mukomeana) and a girl calls her father's sister's husband "husband" (G calls C nkata). Mr. Hollis has not given us the terms for these relationships among the Nandi (presumably the term for father's sister's husband, sendit among the Nandi, refers only to that relative when addressed by a man, when it logically corresponds to sister's husband and daughter's husband, see diagram S, Q, R), so we do not know if the corresponding terms are used among them.

THE MASAL.—In the Masai system many of the same features are present that are found in the Naudi and Thouga systems, so that the same marriage may be bypothesised among them, though probably the practice may have been discontinued for a longer period, as the consequences it would produce upon the relationship system are not so complete as in the two other systems. Among the Naudi and Thouga the key to the relationship puzzle is found in the term "mother" for mother's brother's daughter; this is absent in the Masai system, where a man calls his mother's brother's daughter by the same term that he applies to his father's sister's daughter. The individual term for father's sister is also absent. Yet six other terms can be explained by the supposition of the prevalence of this marriage. It should be noted that reciprocal terms are more common in the Masai system than in the Naudi.

The following apparent incongruities are the logical sequence of the marriage with the wife's hother's daughter.

The term for mother's brother, ol-apu, is used for mother's brother's son; A calls D and F ol-apu. That the same term is used for father's sister's son can be accounted for, as that is the reciprocal term to mother's brother's son, F and M call A ol-apu.

The father's sister's husband, daughter's husband, and sister's husband are all called by the same term (as among the Naudi); A calls Q, R, and S ol-aputani. Wife's father and wife's brother are the reciprocal terms to daughter's husband and sister's husband, and are called by the same term; R and Q call A ol-aputani. That the husband's father is called by the same term is curious, and is probably due to a false analogy with wife's father; this does not occur among the Naudi and Thonga, and the term has probably only been extended to the husband's father since the marriage with the wife's brother's daughter has fallen into disnetude.

Mother's sister's husband, mother's sister's son, and wife's sister's husband are all called by one term, ol-le-'sōtwa. The only explanation I can see for this is that a man inherited (or married) his father's wife (his own stepmether), as is customary among the Shilluk. There is no difference in Masai between the terms used for blood relations and step relations. The logical consequence of this marriage, coupled with the tendency that all relationship terms should be reciprocal, is, that these three relationships and that of wife's sister's stepson fall under one heading. Thus, if A marries B,* the wife of his father, C, he calls his wife's sister's husband, Z, by the same term as his (step) mother's sister's husband, because he is the same person, and as terms tend to be reciprocal in Masai, Z calls his wife's sister's husband, C. by the same term as his wife's sister's stepson, A. But H (the son of Z) calls his mother's sister's husband and his mother's sister's stepson, A, by the same term because they are the same person. (Wife's sister's son is not given in Mr. Hollis's list, but in his table it is shown as ol-le-'sotwa.) It must be noted that the term ol-le-'sotwa must have originally meant mother's sister's son (itself a reciprocal term), as the feminine form of this term is found in en-e'-sôtwa, which means mother's sister's daughter.

^{*} For convenience the same diagram has been used, but in this case A must be assumed to be the son of C by another wife.

Mr. Hollis points out that those who call each other \(\tilde{\sigma}\)-sindani le-anyit and c-sindani e-anyit respectively avoid each other as a man does his mother-in-law, and that a man cannot marry his blood brother's widow, but only his half-brother's or paternal cousin's widow; "and that no man may marry a nearer relation than a third "cousin, and then only if the terms of address used are ol-le'-s\(\tilde{\tilde{\sigma}}\) and en-e-'s\(\tilde{\tilde{\tilde{\sigma}}\) than a third

The prevalence of a custom among two peoples so widely separated geographically and linguistically as the Nandi and Thonga is of great interest, especially as there are traces of similar features among the Nilotic Negroes (of which I hope to treat at another time). The custom can be traced to the payment of the bride price, but behind this other influences may have been active, for it must not be forgotten that among all the mixed Hamitic Negro peoples of Africa, where paternal descent is now the rule, strong traces of previous maternal descent are to be found.

BRENDA Z. SELIGMAN.

REVIEWS.

India: Antiquities.

Foote: Rea.

Catalogue Raisonné of the Foote Collection of Indian Prehistorie and Protohistorie Antiquities. (Madras Government Museum.) By R. B. Foote. Madras. 1914.

The Foote Collection of Indian Prehistoric and Protohistoric Antiquities: Notes on their Ages and Distribution. By R. B. Foote. Madras. 1916.

Catalogus of the Prehistoric Antiquities from Adichanallur and Perumbäir. By A. Rea. (Madras Government Museum.) Madras, 1915.

These two important catalogues have recently been issued by the Madras Government. The first-mentioned, which is the largest and most complete, relates to the collections made by the late Mr. R. Bruce Foots, who was for a long time superintendent of the Geological Survey of India, and was compiled by him before his death in 1912. The collection had been purchased by the Madras Government in 1904. It is very comprehensive, including objects from every part of the Madras Presidency and a few from other parts of India.

The second catalogue relates to an interesting collection of finds in the Tinevelly District, the most southern part of the Madras Presidency, which were excavated between 1899 and 1904, by Mr. Rea, of the Archeological Survey of India. This was not the first excavation of the site, and the proceedings in 1876 are interesting as illustrating the carelessness and neglect frequently shown by the Indian Administrations of that period, and also the predatory methods of certain German savants. Dr. Jagor, of Berlin, accompanied by the Collector of the District, visited the spot, and excavations were made which resulted in the discovery of many sepulchral urns, implements, weapons, hones, and skulls. "All these articles," the report says, "were "taken away by Dr. Jagor for the Berlin Museum, and none of them reached the "Madras Museum," Comment is needless.

Fortunately the excavations had not gone very far, and those now described show that this "is the most extensive and important prehistoric burial-place as yet "known in Southern India." The objects found are of gold, bronze, iron, and pottery. The gold objects are very thin oval plates, probably diadems. They are illustrated in Pl. I. The bronze objects are mostly cups, bowls, and ornaments (Pl. II). The iron objects are mainly weapons and tools (Pls. III, IV, V). The large collection of pottery is illustrated in the remaining plates (VI to XII).

M. LONGWORTH DAMES.

A second volume on the Foote Collection, containing Mr. Foote's notes on the ages and distribution of the antiquities he collected, has been issued during the

present year. It will be welcomed by all students of the subject, as it throws much needed light on the objects described in the entalogue. Mr. Foote's Introduction (A) and General Notes (B) will also be read with much interest. Among the latter, section 7, "Distribution of the Prehistoric Peoples," contains a discussion on the settlement of the Dravidians in Southern India, and the route followed by them in their advance from Balochistan.

Mr. Foote's conclusions are not altogether in agreement with those come to by Sir T. Holdich in the "Gates of India." He finds that no prehistoric monuments are found near the coast between the Indus and the Gulf of Cambay to support the theory that they followed the coast route, and thinks it more probable that they skirted the Raun of Kachh depression to the north, and turned southwards along the eastern side of the Gulf of Cambay. The notes generally are of great value.

M. L. D.

Egypt: Archæology.

Blackman.

Rock Tombs of Meir. Part III. By A. M. Blackman.

This third volume of the tombs of the Middle Kingdom at Meir keeps 48

of the interest of its producessors, but at the same time it shows, even more clearly

up the interest of its predecessors, but at the same time it shows, even more clearly than they do, the faults in the author's presentation of the subject. There are two grave faults. The first is the footnotes. The habit of footnotes is one which steadily increases unless severely restrained; they should be restricted, if used at all, to little more than references. To read a page of Mr. Blackman's letterpress is a fatiguing performance; it is impossible to read straight on, as one dare not miss a note lest one should miss at the same time a piece of information which belongs to the subject in hand; while references, which may legitimately be given in footnotes, are scattered in the notes and the text indiscriminately, s.g., p. 20, among others.

The second fault is the arrangement of the plates. The plan and sections on Plate I could, with a little care, have been made to fit into a one-fold, instead of a two-fold, plate; the position of the plan itself could have been reversed without detriment, so as to bring the north to the top of plate, as is the conventional method of plans (i.e., maps) of places or countries; and to have so turned the figures and lettering and their explanation that they might be read with the book the right way up, would have greatly conduced to clearness and case of reference. Again, the scale is perpetually changed; Plates V, XII, XIII, are 1 to 5; Plates VI, VII, VIII, XVIII, are 1 to 4; Plates II, XXVIII, are 1 to 6; Plate XIX is 1 to 7. This atter disregard of the student's, and even of the ordinary reader's convenience, is manifest throughout the volume.

Such books as this are published for the use of students, and therefore no means which conduce to ease and convenience of reference should be neglected. There are certain definite rules which should be followed in the arrangement of plates for publication. Plates should be upright if possible, and the lettering of plans, &c., should be arranged to be read with the book in that position. All scenes from one tomb should be published on the same scale. Folding plates should be avoided as much as possible, but if unavoidable, one fold is preferable to two; compare, in this connection, Plate III, and the waste space on each side of the drawing.

I have criticised the manner of presentation of the material, but with the material itself there is no fault to find. The tembs of Meir are full of interest to Egyptologist and anthropologist alike; and it is by careful drawings such as these, and by the equally careful study bestowed on them by writers such as Mr. Blackman, that so much is known of ancient Egypt. The group of tools and magical implements are of great importance, and one could have wished that Mr. Blackman had

written a short account of them in an appendix instead of cramming the information into the footnotes. It would be interesting to know, for example, if the finger-of-Horus amulet had any connection with the two-finger amulet of the Saite period.

Mr. Blackman has translated all the short sentences which occur in the scenes, with the result that we get a good idea of the collequial expressions of the time. The cook's remark, in praise of the duck he is roasting, is delightful, "I have been over the blaze since the world began, but I never saw such a duck as "this."

The pattern round the approach to the statue recess appears to be unique in Egypt, and is therefore important. It is remarkable that certain patterns occur only in the Middle Kingdom; the ceiling decorations at Beni Hasan as well as this peculiar design, suggest strong foreign influence at this period.

Taken altogether, this volume bears comparison with its predecessors, and we shall look forward with interest to the fourth part.

M. A. MURRAY.

Folklore, Kunz.

The Magic of Jewels and Charms. By G. F. Kunz, M.A., Ph.D., D.Sc. 9 × 6³/₄; pp. xv + 422. With 86 Illustrations, in colour, double tone, and line. Philadelphia and Loudon: J. B. Lippincott Co. 1915. 21s. net.

The writer of this book is a distinguished American mineralogist, for whom stones have long held an interest and a fascination quite independent of their chemical constitutions and the history of their occurrences in nature. The human aspects in their story, from the time when man, in early process of evolution, first acquired the instinct to pick up and the intelligence to preserve the pretty pebbles or the glittering fragments of rock which happened to catch his hunter's eye, have especially appealed to Dr. Kunz, while his mineralogical studies have given him exceptional facilities in gathering information dealing with the decorative, the assumed magical, the real or conjectural therapeutic, and the other not purely materialistic applications of stones. Having been led, almost inevitably, through a study of the supposed occult virtues of gems and other stones, to an examination of the similar virtues of other objects, natural or of artificial forms, he has recorded the results of his reading in the present book and its companion volume, The Curious Lore of Precious Stones, published a couple of years before it.

The book is frankly a compilation, the author arranging his mass of material according to classes of objects, and not with reference to any theories the soundness of which he wishes to prove. Nor are any broad deductions attempted, although occasionally the author puts forward suggestions of his own concerning such things as the origins of certain beliefs, or insufficiently identified substances referred to by some of the older writers, and sometimes (e.g., Preface, and p. 268) makes a pleafor a more widespread recognition of the value of symbolism, as expressed in ornamental objects or in practices, and now so often eclipsed by the materialistic tendencies of modern life, as a means for making existence sweeter and happier. It is just because it is a compilation that the book should prove of service to students of ethnology, and especially of folklore, for it is a storehouse of extracts, often suggestive, from works which such students are, in the ordinary course of events, not likely to examine. It is sufficiently lightly written to make agreeable reading for layman and student of folklore alike, and, while the latter may not find the whole of the collections of direct value for his studies, he may open the volume anywhere with almost a certainty of finding something of at least human interest. The book contains a great deal, and often curious, information concerning amulets and talismans, and should consequently be especially useful to students of the psychology underlying curative and protective magic. It is pleasant to be able to

record that the writer of a book of this character has given chapter and verse for practically all of his statements, and that he has for the most part been guided wisely in the selection of his authorities.

It is not possible, within the limits of a brief review, to do more than call attention to some of the collections of extracts out of those of most interest to the folklorist. In Chapter I, "Magie Stones and Electric Gems," we find material dealing with stones of service for rain-bringing; the shamir stone used by King Solomon for dressing the stones of his temple; the stones buried in the flesh of persons who would be invulnerable; the preservation of pebbles and other stones by primitive peoples; the legends attached to certain rocks or boulders; and the preservative or therapeutic employments of amber and of loadstone. Chapter II deals with the beliefs connected with meteorites, or supposed meteorites, and other objects thought to have fallen from the skies, including therewith the prehistoric stone implements found in the ground, and ascribed, in many parts of the world, to colestial agencies. In Chapter III, "Stones of Healing," we have much matter taken from the mediseval and Renaissance treatises on the supposed therapeutic virtues of precious and semi-precious stones, sometimes carried, sometimes, generally in the form of a powder, taken internally. "On the Virtues of Fabulous Stones, Concretions, and Fossils" (Chapter IV), is in part concerned with stones swallowed by animals and thus acquiring new virtues; certain bones and concretions (exclusive of bezoars) found, or supposed to be found, within the bodies of animals; the well-known hollow concretions called "ragle-stones" (actites), whose employment as amulets for expectant mothers was known to Pliny, and survives to-day in various parts of the Continent; fossil objects of animal origin, such as the shark's teeth, known as glossopetra, belemnites, sea-prehins, crinoid stems, shells, and corals; and the various objects passing as toad-stones. Chapter V, "Snake Stones and Bezoars," is practically a continuation of the previous chapter, the great amount of material brought together with reference to those classes of objects (the former including both the stones supposed to be found by or in snakes and those believed to remove the poison from snake-bites) making advisable a chapter devoted exclusively to them; in this, the author puts forward the suggestion that the "snake-stones" referred to by Tavernier. and hitherto unidentified, were of tabashir, the highly pocous silicious concretion found in the joints of certain bamboos. "Angels and Ministers of Grace" (Chapter VI) deals briefly with the angels of Jewish and Christian tradition, and with the assumed activities of a number of the miracle-working saints of the Christian calendar. The two chapters (VIII and IX) on amulets, " are devoted to the study of the talismanic " yirtues attributed to precious stones and gems, as distinguished from the curative " powers with which they were credited," and contain a great quantity of miscellaneous material.

The book is excellently illustrated by a large number of full-page plates, some of them in colour, and a considerable number of line blocks, the latter being reproductions of illustrations in books of the fifteenth to eighteenth centuries, inclusive. There are, unfortunately, many small errors in the volume, but most of these manifestly have been due to faulty proof-reading, or to the inclusion of new matter or the exclusion of some of that originally prepared. These errors, which are not to be wondered at in the quoting of material requiring some seven hundred footnotes in the specifying of its origins, have, no doubt, in most cases already been observed and noted for correction in any future editions. The reviewer would suggest that the index be considerably enlarged in any future edition, because, although it at present takes up some fourteen pages, it is far from complete enough to serve the purposes of the student who wishes to use the book as a work of reference. In conclusion, the reviewer can say that, from his personal point of view, be has found the careful

reading of the book a pleasure, and that he has set down its name as that of a treasury of potentially useful material.

W. L. H.

Negro History. Woodson.

The Journal of Negro History. Edited by Carter G. Woodson. Vol. II, No. 1, January, 1917. Published quarterly. Association for the Study of Negro Life and History. Lancaster, Pa., and Washington D.C. Price \$1.00 a year, 25 c. a copy, postage extra.

The current number of this interesting Journal contains papers on the African Slave Trade, the Negro in the Field of Invention, Anthony Benezet, People of Color in Louisiana (Part II), Notes on Connecticut as a Slave State, Letters of Anthony Benezet, Reviews and Notes. The Journal was started at the beginning of 1916, and it would appear to be the first serious attempt to place on permanent record the history and sociology of the American Negro. The enterprise is one which deserves success, since it should form a source of valuable information concerning events which have no parallel elsewhere, and which have in this country been far too little studied. If the Journal can maintain the standard of the present number it should gain a wide circle of readers.

H. S. H.

Madagascar.

Sibree.

A Naturalist in Madagasear. By James Sibree, F.R.G.S.

In his book, A Naturalist in Madagascar, Mr. Sibree has recorded his observations and impressions made during a residence of many years in the island.

The author presents his interesting information in the form of jottings on various subjects, which he made while on his journeys and expeditions throughout the country. On this account, his notes on ethnology, natural history, and the customs of the inhabitants, intermingled as they are, in every chapter, produce somewhat the impression of an alla podrida on the reader.

The work, however, does not intend to be a treatise on botany or zoology. Mr. Silven's aim has been to enlighten the general reader on the subject of Madagascar, rather than the student, and in presenting an intelligible survey of the main features of the country, whether geographical, otherological, or otherwise, he is much to be congratulated, as he has provided an excellent introduction to the further study of the island.

In the early chapters of the book, the author describes his first journey through the country in 1863, before the French conquest had taken place, when there were few roads, and the method of travel was by cauce along the rivers, and by palauquin (filanjāna), through the dense forests of the cast coast region, and his narrative will remind those who have travelled in other tropical lands of similar experiences.

The mountain ranges in Madagasear rise to the height of 9,000 feet, and the climate is stated to be hot and rainy from November to April, and cold and dry from May to October. The region around Antananarivo, the capital, which is situated on the bare highlands of the interior province, seems to be thickly populated, and from this clevated spot one hundred other towns and villages can be descried in the surrounding district.

The author makes some interesting remarks on the influence which the missionaries have had in altering the native style of architecture in the territory of Imèrina, and on the deep fosses which still surround the ancient towns, and he mentions the remarkable fact that there is no native Hova style of carving or ornamentation, for anything like indigenous art does not seem to have ever existed among the natives of this district, though in another province there is carving, both in the houses and the tembs.

There are no large carnivors in Madagascar, and fleet-footed animals, such as

deer, are non-existent; on the other hand, it is the home of the lemurs and the aye-aye, a creature peculiar to the island, and the only species of its genus. It is interesting to note, though, how in some respects this great African island resembles other tropical lands, for example, in the heavy thunderstorms which occur in the afternoons in the rainy season, in the sharp awas of the grass seeds which penetrate the clothing of the traveller when proceeding on foot, and prick like so many pins, and in more numerous instances than can be given here.

Mr. Sibres gives some vivid sketches of the scenery of the island and of the curious volcanic districts of the interior, but of the outlying forest of the western side of the country, inhabited by the tribes called "Behosy," who are said to still

exist in their primitive state, we hear little.

The custom of taboo (fady) is well known in Madagascar, but owing to the

introduction of Christianity this observance is losing weight with the people.

With regard to the funeral customs of the Malagasy, these are doubtless of some antiquity, and differ according to the different races which inhabit Madagascar, the Hovas being of Malay origin, and the chiefs of the east coast tribes of Arab descent, but the author has not specifically traced the extent of the various racial influences on the population.

Mr. Sibres writes of Madagascar before the French occupation. It would have been interesting if he could have allotted a chapter to the changes effected in the country since then.

The book contains many good illustrations, and three maps.

E. F. N.

India: Archæology.

Archaelogical Survey of India. Report, 1912-13.

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The first part of the Report for 1912-13 has been noticed in Max for November 1916. The present volume, issued this year, contains the complete report. The most important part of it is Sir J. Marshall's full account of the excavations at Taxila. Few of the results of modern archaeological exploration are comparable with the disclosure of the ancient capital of northern India, which was in the full height of its prosperity when Alexander's invasion took place. It had already had a long history, of which little is at present known; and it probably was the capital of a Persian province under the Achromenian kings.

After Alexander's time it was in succession under the Maurya kings, the Bactrian Greeks, the Sākas, Indo-Parthiaus, and Kushans, until its final ruin during the Hun invasion during the fifth century A.D. The site was first identified by General Sir A. Cunningham, and some discoveries made by him are described in Vol. V of the old Archwological Survey, but no systematic excavation has been undertaken until now.

The undulating hill-surrounded plain in the north of the Rawalpindi district is an ideal site for a great city, and to the casual visitor in bygone days seemed to cry aloud for careful examination. This it has now received, and the results of the exploration, as far as they have gone, justify all the expectations which had been cutertained. There are the remains of three distinct cities, locally known as the Bir Mound, Sirkap, and Sirsukh, of which the first-named is considered by Sir J. Marshall to be the earliest, the second to be the capital under the Bactrian Greeks, Sikas, and Parthians, and the third to be the Kushan capital. In addition to these important sites, there are several isolated groups, some of which are marked by Buddhist Stūpas. A few of these, visible above ground, have long been known.

The exeavations at Sirkap have been most extensive, as can be seen on reference to Plates XVI, XIX, XXV, XXVII, XXIX, and XXXII, and the plans facing pp. 24 and 34. The other principal excavations have been at some of the outlying groups, especially the Dharmarajika Stūpa, the Jandiāl temple, and to a small extent

at the Bir Mound, the earliest city site. At all these places interesting discoveries were made, among which may be mentioned the Apsidal temple and the extensive palace at Sirkap, which in its arrangement suggests a comparison with Sargou's palace at Khorsabad. The silver scroll bearing a Kharoshthi inscription figured in Plate XI was found inside a steatite vase in the Dharmarājika Stūpa. This inscription, which has already formed the subject of a discussion among Prākrit scholars in the Journal of the Royal Asiatic Society, is of great importance for the history of the Sākas in north-west India.

These excavations are also notable for the historical evidence regarding the succession of dynasties at Taxila, which can be derived from the find-spots of colus. Briefly, Sir J. Marshall finds that the site of the capital was transferred from Sirkap to Sirsukh after the time of Wēms Kadphises, and that no colus of Söter Megas, Kasishka, Huvishka, or Vāsudeva have been found in Sirkap. He concludes with the remark: "Thus, there is now clear and incontrovertible evidence that these three "kings, Kaulshka, Huvishka, and Vāsudeva, were later than the two Kadphises." He thus claims that the controversy which has existed among scholars on this point has been definitely settled. Whether the evidence is "incontrovertible" or not, it may at least be admitted that he has made out a good primâ facie case.

Space will not admit of more than a cursory allusion to the other contents of this volume. Dr. Spooner has continued his investigations on the site of Palibothra, and has found further evidence which supports his theory of Perepolitum influence in Mauryan times. From Burma we have a very interesting series of terra-cotta reliefs representing Buddhist jätakas, probably of the eleventh or twelfth century. These are from pagedas at Pagan, and are fully represented in the plates. In the article on Conservation in Burma we have an account also of a purely Hindu (Vaishnava) temple of about the thirteenth century at Pagan, in the heart of Buddhist Burma. Allusion may here also be made to the conservation of the very fine Patothamya Pageda at Pagan, of which a representation will be found in Plate XII of the first part of the Report for 1913-14. The bronze figure of a Bodhisattva given in the same plate, although found in this pageda, seems to be rather Tibetan than Burmese in origin. This opinion is based not only on the general style of the work, which is purely Tibetan, but on the shape of the vajva or dorje, which lies in front of the figure. This figure has no suggestion of the hisayāna Buddhism of Burma.

Further notice of Part I for 1913-14 is reserved until the complete Report is received.

M. LONGWORTH DAMES.

ANTHROPOLOGICAL NOTES.

Accessions to the Library of the Royal Anthropological Institute.

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(Donor indicated in parentheses.)

Hawaiian Legends of Volcanoes. Collected and translated by M. D. Westervelt.

72 × 5. 205 pp. Illustrated. Ellis Press, Boston, Mass. 6s. net. (The Author.)

Customary Law of the Lahore District. Vol. XIII. Revised edition. Compiled by R. C. Bolster, I.C.S. 9½ × 6½. 58 + fry pp. Government Printing,

Punjab. 1s. 6d. (Secretary of State for India.)

The Austrian Academy of Sciences and Sir Edward Tylor.

At a meeting of the Austrian Academy of Sciences the President announced the loss which the Academy had sustained by the death of one of their honorary members, Sir Edward Burnett Tylor, late Professor of Anthropology at Oxford. The members expressed their sympathy by rising from their seats.



NATIVES OF PAPUA USING THE WOODEN KIPI TRUMPET AND CONCH SHELL.

ORIGINAL ARTICLES.

British New Guinea. With Plate E. Chinnery. Further Notes on the Use of the Wooden Kipi Trumpet and Conch Shell by the Natives of Papua. By E. W. P. Chinnery. 55 F.R.G.S., F.R.A.I.

The wooden trumpet which forms the subject matter of papers in Man, 1915, 11 (Seligman), and 1916, 16 (Beaver), is, I think, the native instrument of the bash tribes, and is distributed in one or more of the following forms throughout inland Papua. In many of those tribes who have had friendly communication with the cosst, the couch also is used. In size and shape the carved instrument varies considerably, and, while the mouthpiece in some is a lateral hole near the closed apex, in others the apex is open, and the sound is produced by applying the mouth to a short inserted bamboo tabe, cemented into position with beeswax. The last instrument is the only one I have seen amongst the tribes generically known as Koiari, who inhabit the Owen Stanley Range, between Mount Victoria and Port Moresby, but both forms are common to the bush tribes of the north-cast and northern divisions. An emergency instrument in the shape of a short bamboo tube, the sound being produced either through a lateral hole or through one end, is in use everywhere, from the Dutch to the late German boundary.

The conch is a musical as well as a signalling instrument, and, as the notation varies, one or two additions to Mr. Beaver's examples may be of interest:—

Tribe.	Alsem.	Dancing.
Gkerewa (Goaribari), Western Papua. Kai-irı (Kiko River), Delta Division. Doboduru, Northern Papua - Koieri, Central Papua	(Three long and short.) (All short.) (One long, then short.)	(One long and succession of short.) (One long, then short.) (All long.)
Tribe.	Announcing a Death.	Successful Hunting.
Gkerewa (Goaribari), Western Papua. Kai-iri (Kiko River), Delta Division. Doboduru, Northern Papua Koiari, Central Papua	(Two long, one short.) (All long.) (Very long.)	(Long.) (Long and then short.)

Signalling with the trumpet, or conch, is usually performed by males, but it appears that women may also use the instruments. In the dalts of the Kikori River the women beat a kind of tateo on the cance sides with small, hard sticks to announce the killing of men and pigs—three slow, and a succession of quick blows—while the men sound the calls on the conch. Signalling by the women is not confined to the Gulf of Papua, for in the northern division women who have fulfilled certain conditions may acquire a privilege known as mangara (ma = a cance), which permits them to command the attention of the villagers by rapping, smartly,

upon a piece of broken cance with a hard-wood stick, kept in the village for the purpose. I have been disturbed at all hours of the night by the mangera and the shrill tones of angry females reciting their complaints, which in most cases were caused by amorous introders.



The Binanders tribe has many mythical tales (kiki) in connection with the origin of the conch shell as an instrument of utility, one of which, related by Doi-inc (whose name means "scented vine") follows:—

"Long ago, 'at the very first,' there lived on the Waria mouth (river late G.N.G.) an old man, his wife, with a male and female child. That man was Andarahau, and that woman, his wife, was Gobara. Now, for some reason, 'I know not what, nor did my father,' those people had been smitten with a curse, which closed their mouths and genital organs. 'Now it is bad to suffer in that way, and I think they must have committed some great wrong, perhaps they ate a "tabu" food, or perhaps they unconsciously spoke the name of a deceased relative, or one whose name should not have been mentioned.' At any rate, there they were, skilled in game and fish sorcery, with vegetable food in abundance, but not, alas, the capability of eating and enjoying it, 'it makes my belly ache with sympathy.' However, they made the best of things. Andarahau and his male child amused themselves in the practice of their skill, and caught many fish and much game, while the women



Fig. 6.

secured the pretty shells and weeds of the sea and decorated their houses 'until their eyes 'were pleased.' Much game and many fish fell to the weapons of the man and boy, but this was cast aside and wasted—many carcases and bodies of animals 'ying in the bush where these two roamed.

"Now far away in the mountains where that river came out of a hole in the ground,

there lived a number of people, and those were frequently hungry, for game was not pleutiful, and the land was stony and did not yield much vegetable food. One day two of their hunters, Kaumi and Besi, went further down river than was their wont, and found lying on the ground many carcases of animals, killed and discarded by Andarahau and his boy. Now these two boys were fine hunters, and, although the dead game suggested the existence of people down river, they were

unafraid, and on the spot decided to visit the strange hunters, who had so much game they could afford to throw such fine animals away.

"Accordingly they returned to their village, told their fathers of their plans, and prepared for the journey. Then one morning, armed with their fathers' weapons, wearing charms made by their mothers to protect them from the machinations of evil spirits, and their head-dresses and kortopu (the decorations of a homicide)* 'as is the custom,' they set out and followed the course of the stream towards the rising sun. During their journey they saw many victims of Andarahau's prowess in the hunting field, and wondered greatly, until one morning they walked into the village at the river mouth, and gazed spellbound at the strange houses, and beautiful shells, and ornaments, the like of which they had never seen before.

"Now Gobara alone was in the village, and, perceiving the two youths, she reached for a conch shell, and sounded it. The splendid reverberating note of the instrument, and its beauty, evoked the undisguised admiration of the youths, who immediately began stripping themselves of their ornaments to exchange for it, but Gobara, amused at their excitement, and delighted with their youthfulness, and their strong lithe bodies, and light-coloured skins (for all the mountain people are 'light-'skinned because their forests are so dense that the sun rarely reaches their haunts in the depths of the jungle'), beckened them to be seated on mats made from the grasses of the swamps, which she placed for them in the shades of the coconut trees, and rubbed her hands over their skin affectionately, 'for she was a motherly soul, and such is the custom of those women,' till presently her man and children arrived.

"The family-which-could-not-eat was greatly pleased with the youths, and, while the men admired their weapons and ornaments, and the woman fussed over them, the girl prepared some food, which they are and enjoyed, for it was cooked in pots with many strange vegetables which they had not tasted before. They were shown the many shells and weeds which had so pleased them, and these they fingered with great interest.

"On the days which followed they accompanied Andarahau and his boy on their hunting excursions and learnt many things they had not known, and so the days passed pleasantly and profitably, until at last the time came for them to return to their people. The parting was very sorrowful, for Kaumi had fallen in love with Andarahau's daughter, and she with him. 'It is no lie' that she was a fine girl, very attentive to his wants, and unlike the unmarried girls of his tribe, who were few, and inclined to be lazy, while their speech was incessant and their manners shrewish. But before parting Andarahau had asked them to bring their people to see him, and so that the boys could call them hurriedly together he loaned them the big couch shell with the powerful note which had so pleased them and which was so superior to the bamboo they had been accustomed to use, and so with many presents they departed, leaving the family-which-could-not-eat to take up life again where they had left it.

"The mountain people had commenced to make new weapons, for the prolonged absence of their youths had alarmed them, and they had intended to go in search of them, and so delighted were they at their return that a big dance was beld, and during the festivities they heard of the family down river, and gazed on the presents brought back by the boys; no less were they delighted at the prospect of unlimited game and food. A friendship with Andarahau promised, and the dance finished, all set about the making of arm and waist bands from the many-coloured fibres of the mountain vines, 'for which these people are famous,' the manufacture of large netted bags, and other crafts 'in which they are skilled.' Long strings of dogs'

teeth were collected, and the beautiful plumed birds of the mountains were caught, and their gorgeous feathers and plumes made into head-dresses, and shortly after the return of the boys the people of Kaumi and Besi, laden with 'New Guinea somethings,' left their mountains for the new friends down river, 'whence the sun ascended.'

"And Andaraban was prepared for them, for every day he and his boy had killed game and lain it upon a long platform, where it had been smoking over neverdying fires, and when the people from up river entered the village, tired and weary, on one morning, the long rows of cooked pig, 'so much that they could not count it,' pleased their eyes and took the stiffness from their limbs, for the pigs on Andarahau's land were large and fat, not bard and sinewy like those which roamed their mountains, 'and the mountain' people are very fond of pig.' The days of feasting and dancing which followed occuented the friendship, and many things were taught to the people from the mountains-things which were useful to them. Gobars, for instance, although she could not eat, was a wonderful cook, 'and good ' cooks are very useful, for they can give much pleasure and satisfaction,' and she taught the mountain women to make pots and cook in them, and she took them into the bush and showed them where and how to gather and prepare the edible herbs and vegetables, and that in itself meant much to the mountain men, for their wives had not known of the art of stewing, their only method of cooking food being the reasting on hot stones, 'they even did not know in those days how to cook in bamboos.' The fact that the family could not join them in the feasting caused much distress amongst the tribe from up river, and the father of Kaumi called together the principal men of his tribe, and they conferred secretly in the bush one morning, and as a result the father of Kaumi one day, returned to his mountain home. Many days passed before he came back to the river mouth, but at last he arrived, and in a netted bag 'which these people wear' were many herbs, ferns, and vines, such as are carried by sorgerors, for Kaumi's father was, in fact, a man skilled in magic, and this magic he intended to use for the purpose of restoring the family the use of their afflicted organs, for was not his son in love with the girl of Andarahau, 'and it is not good to love in that manner one so afflicted,'

"A house was creeted in the bush near by, and he and his family were induced to enter and sit around the fire which blazed in the centre. In Andarahau's hands the herbs were placed, and he was instructed to throw them in the fire when called upon to do so. All holes were then 'closed, and Kaumi's father called to Andarahau to throw upon the fire the herbs; he did so, and immediately there arose a dense volume of pungent fumes, which filled the room and made them choke as they inhaled them. Around the room they staggered in agony, for their bodies were filled with the powerful smoke almost to bursting point—so full were they that presently their bodies could not contain it, and the openings, which had been closed, hurst open, and at last those outside who had been anxiously listening, heard the cries from within, and opened the door and caught the members of the family as they staggered out, half suffocated and half blinded. The elder men, however, were ready, and soon revived them and took them back to the village, where the mountain women had prepared for them, in the manner taught by Gobara, a tempting stew of shellfish and vegetables, 'which is good for sick people to eat.'

"In this manner the 'family-which-could-not-eat' became cured. A huge feasting and exchange of presents followed, and the marriage of Kaumi and the girl was celebrated, and for his wonderful magic in curing the afflicted family Kaumi's father was presented with the much-coveted couch shell:——'And that's what for."

According to the myths of the Binandere, the corrugated markings on the lips of the shell were, in the words of Doi-ino, caused as under :-

" Right at the very beginning," when the conch shall was the toy of imbaga

(crossodile), who lived at the mouth of Pai-awa River (late German New Guinea), there was, where Insia hill now stands on that river, a large Iguans (Varanus), known as duduba (Binandere language). Now duduba, one day, was reaming ou the beach near the river mouth in search of food, and he came across the couch shell, with which imbaga had been playing but had left on the sand a few moments before while he slipped into the water to waylay a school of unsuspecting fish which frolicked a short distance out. Duduba, 'in the manner of Iguanas when they 'are curious to know what a hole conceals,' stuck his head into the opening of the shell, and heard its murmur. Now this puzzled him not a little, but the sound also pleased him, so, being of a curious nature, 'as iguanas are,' he decided to take the shell along with him, for, while it promised to interest him until be had accounted for the murmur, the sound also soothed him, and he returned with it to his haunts.

"Imbaga, having filled his belly with fish, returned to the beach to play with his toy, but to his rage found is missing. The footmarks were plain, however, and he lost no time in following them, and presently he came upon the unsuspecting duduba seated on the ground calmly muching kovi, 'a small insect relished by Iguauss,' and, lying alongside, was the couch.

"Approaching warily, imbaga snatched the shell by the right lip, just as duduba, seeing him, grabbed the left. A tussel casued, but the strength of imbaga prevailed, and, recovering his property, he called duduba things that are bad, and slipped into the water. So hard did they pull during the struggle for the shell, that imbaga left the imprints of his claws large and wide on the right lip, and the nails of duduba, small and closely set, are imprinted on the left lip."

N.B.—Words in inverted commas express the literal translation, as nearly as possible, of the explanatory remarks made by the man Doi-ino in giving me the stories.

DESCRIPTIONS OF PLATE AND ILLUSTRATIONS IN TEXT.

PLATE E.

Fig. 1.—Miai tribe, Hydrographers Range, in the valley of the Mamama River, sounding wooden trumpet.

Fig. 2.—Koko native (wearing homicidal head-dress), sounding wooden trumpet, K.D. Pspua.

Fig. 3.—Ava-Kiko native sounding bamboe trumpet, Kikori River, Delta Division.
Fig. 4.—Koko native, Kumusi Division, sounding conch shell.

ILLUSTRATIONS IN TEXT.

Fig. 5.—Wooden trumpet used in the bush tribes of Northern Papus and in districts south of Mount Victoria (one-third natural size).—(a) Wooden funnel, (b) Plaited cane bands, (c) Beeswax, (d) Bamboo tube (mouthpiece).

Fro. 6.—Common couch shell used throughout Papua.—(a) Mouthpiece,
(b) Corrugations of mythical crocodile, (c) Corrugations of mythical iguana.

E. W. P. CHINNERY.

New Guinea.

Haddon.

Notes on Wooden Trumpets in New Guinea. By A. C. Haddon.

The following notes on the distribution of wooden trumpets in Netherlands New Guinea, and on the Sepik River are supplemental to Mr. Chinnery's
paper, Man, 1917, 55.

Sir William MacGregor says that the musical instruments of the Tugeri, or Kaia-kaia, are the drum, Pan's pipes, and the ecconut-shell fashioned like an ocarina (Annual Report, British New Gninea, 1895-96 [1897], p. 56); but in the Annual Report for 1897-98 [1898], on pl. 26, "Tugeri Musical Instruments," he figures two objects which have every appearance of being conical wooden trumpets, presumably with a terminal hole. O. Finsch is of a similar opinion (Südsecarbeiten, 1914, p. 334.). Each trumpet is a wide cone with an elongated end; where the narrow part begins there appears to be an annular swelling or bead, to which a long loop is attached; otherwise they seem to be devoid of carving. These trumpets are not unlike that figured by Seligman (Man, 1915, 11), but the latter has a lateral hole, as has that figured by Beaver (Man, 1916, 16). On writing to my friend, H. W. Fischer, of the Rijks Ethnographisch Museum, Leiden, to ask if he knew anything about these trumpets, he wrote to say that he had seem a specimen from Mčrsukč in a private collection. Later he wrote that he had seemed the specimen for the Museum, and he kindly sent me a photograph, which he permits me to reproduce (see Fig. 1). The fretwork handle is a new feature, and the flat carving in front of it is also peculiar. The hole is terminal, and the total length is 87 cm. (34½ ls.).

A. F. R. Wollaston (Pygmies and Papuans, 1912, p. 143), states that, "Beside the drum the only instrument of music they [the Papuans of the Mimika "River, 136° 30' E. long, on the west coast] have is a straight trumpet made from "a short piece of bamboo. This produces only a single booming note and is not "used at the concerts."

H. W. Fischer (Nova Guinea, VII, 1913, p. 133, pl. xxii, pp. 8-12), describes what he terms "Bambusflöten," which are single internedes of bamboo, 31-45 cm.



FIG 1.-WOODEN TRUMPET PROM MERAUKE.

long, one end being open, the other being perforated at the node. As there are no lateralopenings they can scarcely be flutes in the

true sense of the term. The surface may be smooth but is generally carved. Two specimens came from the Lorentz River. A similar object is termed in De Zuidwest Nieuw-Guinea-Expeditie, 1904-5, Leiden, 1908, p. 602, pl. xi, No. 468, an exordising tube (Bexweerkoker) from East Bay (Oostbaai), which is supposed to serve for blowing lime. Thus identifying this implement with the tubes out of which Captain Cook thought be saw smoke blown. One of two of Fischer's specimen's have contained lime. When Wollaston came down Island River, on the west coast, he saw some people who "holding short bamboos in their hands, jerked them in our direction and from the "end came out a white cloud of powdered lime, which looked like smoke. This "custom was noticed by Rawling when he first visited the village of Nimé, and it "was recorded by some of the early voyagers (Captain Cook, H.M.S. Endeavour, "1770; Kolff's voyages in Dutch Brig of War Dourga, 1825-26), but the meaning of it has not yet been explained" (loc. cit., p. 219).

O. Schlagiuhaufen (Abhandl., K.-Z.-A.-E.-Mus., Dresden, XIII, No. 2, 1910, p. 35) appears to have been the first traveller to describe wooden trumpets from New Guines. His two examples had a lateral hole, were carved all over, the narrow end being carved to represent an animal's head; their lengths respectively were 37 and 62.5 cm., and their diameters 13 and 14 cm. He obtained them at the last village he visited on the Sepik (Kaiserin Augusta River), apparently about 386 km. from the mouth. F. von Luschan, Baessler Archiv, I, 1911, p. 111, fig. 20, describes a well-carved specimen from the Sepik, 111 cm. in length and 13 cm. in

greatest diameter. R. Neuhauss (Drutsch Neu-Guinea, I, 1911, p. 315), says that in the middle region of the Sepik wooden horns are used for signalling which are 50 to 100 cm, long, with an opening for the mouth at the side near the tip, as in the Triton shell trumpet. He adds: Although nothing very certain is as yet known about the language of these people, everything points to their being immigrant Melanesians, among whom the use of the Triton shell is inherent. There are no shells of this kind in the river, so what could be more obvious than that these people should carve an instrument of wood to replace it. In Fig. 215 he illustrates a typical carved trumpet and a plain cylindrical form, both having a lateral aperture; they came from 320 to 340 kilometres from the mouth of the river. On p. 315 he also gives the notes of some of the signals made with the Triton shell trumpet by natives on the north coast of Huon Gulf. O. Roche (Der Kaiserin-Augusta-Fluss, 1913, p. 480, figs. 442-446, and pl. lxxx, fig. 1) describes several wooden trumpets, with a lateral hole, from Angöröm (112 km.), Kämbrinöm (166 km.), where they are known as yŭări or tuai, and at 293 kilometres village (? Radja), where they are called Aul. They vary in length from 55 to 92 cm. (214 to 364 inches). The narrow end may terminate in a blunt point or be carved into a human or animal head, and there may be other simple carving.

Reference may also be made to wooden or bamboo trumpets, or singing tubes from Anstralia. R. W. Coppinger, Voyage of the "Alart," 1883, p. 204; R. Etheridge, Macleay Memorial Volume (Sydney), 1895, p. 242, pls. xxx (fig. 7), xxxi (fig. 6); E. C. Stirling, Rep. Horn Ex., IV, 1896, p. 75; W. E. Roth, N. Queensland Ethnog. Bull., 4, 1902, p. 23; W. Baldwin Spencer and F. J. Gillen, Native Tribes, C.A., 1899, p. 607, figs. 119, 4; Northern Tribes, C.A., 1904, p. 705, fig. 278; H. Basedow, Trans. Roy. Soc., S. Australia, XXXI, 1907, p. 48 (with further references); W. Foy, Ethnologica, II, 1913, pp. 3, 4; W. Baldwin Spencer, Native Tribes, N.A., 1914, p. 390, pl. xxvi.

A. C. HADDON.

Pacific Islands.

Edge-Partington.

Hawalian Squid-hook Sinkers and Sling-stones. By J. Edge- 57 Partington.

My attention has been drawn to a mistake made by Captain Cook in Vol. II, p. 248 (Third Voyage), 1784, and handed on by Wood in Man and His Handiwork, II, p. 434, in which the sinker of a squid-hook is described as having been used as a sling-stone. Cook says "We also suspected that they use slings on some occasions; for we got some pieces of hæmatites or blood-stone, artificially made of an oval shape, divided longitudinally, with a narrow groove in the middle of the convex part. To this the person, who had one of them, applied a cord of no great thickness, but would not part with it, though he had no objection to part with the stone, which must prove fatal when thrown with any force, as it weighed a pound. We likewise saw some oval pieces of whetstone well polished, but somewhat pointed towards each end, nearly resembling in shape some stones which we had seen at New Caledonia in 1774, and used there in their slings."

Brigham in the Memoirs of the Bishop Museum, Vol. I, No. 4, Hawaiian Stone Implements and Stone Work, p. 20, figures and describes the squid-book, with several plates of stone sinkers; these exactly tally with Cook's description of the "stone of hæmatite, artificially made of an oval shape, divided longitudinally, "with a narrow groove in the middle of the convex part." Brigham, both in the memoir and in his catalogue of the Bishop Museum, 1892, II, p. 102, and Plate 17, shows how these sinkers are attached to the squid-book.

With regard to the sling-stones all authorities agree as to their size and shape. Cook, in the paragraph above quoted, Brigham, in his estalogue, II, p. 68, describes them as follows: "The average size of these sling-stones, when fashioned into the "usual form, pointed at the ends, is 2.4 inches on the axis, and 1.7 inches "transverse diameter. The weight averages 5 ezs., with a range from 10 to 2½ ezs.," and in the Memoir, p. 13, he describes their manufacture. Alexander in A Brief History of the Hamaiian People, speaks of "smooth round pebbles," and Jarves' History of the Sandwick Islands of "small stones;" not a single writer bears out Cook's statement, that these sinkers were used as sling-stones; they were, however, used as net-sinkers, and Dr. L. Gordon Yates figures one so used in "Some Relies from the Hawaiian Isles," published in Records of the Past, Part IV, Washington, 1902. It was probably a squid-hook sinker put to this use which Cook saw.

A "cord of no great thickness" hardly describes the Hawaiian sling, which was roughly made of Paudanus leaf.

J. EDGE-PARTINGTON.

Ethnography.

Peake.

The Racial Elements concerned in the First Siege of Troy. By Harold Peaks.

I am very grateful to Mr. Migeod for the interest he has taken in my paper, but may I suggest that he read it again, when he will find that I have not altogether ignored the existence of the Homeric epies. On pages 154 and 155 I mentioned that the campaign described in the Iliad led to the destruction of Hissarlik VI, while it was to the fall of Hissarlik II that my paper referred.

With regard to the evidence as to the inhabitants of Grosce given in Genesis x, 2 and 4, I find that even the most orthodox commentators, such as Canon Driver, are agreed that these verses were written by the author generally known as P., who is believed to have lived at the time of the Babylonian captivity. It was only natural to assume that the ethnological speculations of an exiled Jew of the sixth century could have little evidential value as to the inhabitants of Europe towards the close of the third millenium.

Whether Greeks were in Greece at the time in question depends on what is meant by Greeks; as I said on page 155, such terms are mislending at these early dates. The question is too large to enter into here; but all scholars are agreed that the Greeks were a mixed people, and the question to decide is whether they were composed of two elements, as most authorities, following Professor Ridgeway, are inclined to believe, or whether three racial elements entered into their composition, as I am beginning to suspect from various pieces of evidence, anthropological, archieological, mythological, and linguistic.

HAROLD PEAKE.

Anthropology.

Nuttall.

The Piltdown Skull. By T. E. Nuttall, M.D., F.R.A.I., F.G.S.

Having read in Man the two recent communications dealing with the Piltdown skull, and having interested myself in the already bulky mass of literature dealing with this skull, I should like to offer a few personal impressions about its

size and type.

Being a medical man, and also a student of Anthropology, I can perhaps claim that my interest is somewhat more enlightened than that of the ordinary layman. Moreover, I happened to be present at the Geological Society meeting (December 1912) at which the reconstructed skull and mandible were exhibited and described. I was present also at another meeting of the afore-mentioned society (December 1913) at which the skull and mandible, together with the then newly-discovered tooth, were exhibited and discussed.

Speaking of the size of this brain case, I am persuaded that the truth, in this, as in so many other, instances, lies between the widely-divergent estimates of the

two conflicting schools of thought which are represented in the learned and distinguished gentlemen who effected the reconstructions. Dr. Smith Woodward's first estimate of the cranial capacity of the Piltdown skull (1,070 cc.) is undoubtedly much too low. Probably his amended estimate, though higher than the earlier, errs considerably on the small side. On the other hand, Professor Keith's early estimate of 1,500 cc. was certainly too high, and not improbably his present estimate of 1,397 cc. errs somewhat in the same direction, for it must be remembered that he classes this as a female skull, and regards it as corresponding to a male skull of 1,550 cc. Professor Keith's estimate is, I feel certain, much nearer the truth than either of Dr. Smith Woodward's.

It may seem presumptuous to attempt to adjudge where such eminent doctors disagree, but I can at least claim to have been a very interested onlooker in this matter, and it will readily be admitted that an onlooker sometimes obtains a more comprehensive view of a "game" than those who are engaged in it. Certainly the onlooker is more likely to take a dispassionate view of events than the persons directly concerned in them.

In the first reconstruction of the Piltdown skull from its all too scanty fragments, Dr. Smith Woodward was in error in the placement of at least one fragment. There is little, if any, room for doubting that the left parietal bone was wrongly placed, and almost certainly the right parietal was somewhat out of position, as were also the two occipital fragments—large and small. In his reconstruction Professor Keith no doubt corrected one or more misplacements present in Dr. Smith Woodward's reconstructions, but did Professor Keith himself escape error in the placement of the bony fragments? One wonders. Probably he did not. It would be a marvel if he did.

Clearly there is room for differences of opinion, even between experts, regarding the true position of the occipital and left parietal fragments; for, after having had time to reconsider the whole matter, and after a second reconstruction of the skull by Dr. Smith Woodward and Professor G. Elliot Smith, there exists a considerable difference between the size of the brain case as reconstructed by them and its size as reconstructed by Professor Keith. Has Professor Keith made the brain case rather too large? I more than suspect that he has. For, in a test reconstruction of a skull which was to be built up from bony fragments similar to those comprised in the Piltdown "find," Professor Keith did actually produce a slightly larger brain case than that of which the fragments had previously formed a part. True, the reconstructed skull was not much larger than the original, but it was larger, a fact which possibly enough points the direction in which Professor Keith's method of reconstruction is liable to err. The actual figures of this test case are, 1,415 cc. for the reconstructed skull as against 1,395 oc. for the original one. The slightness of this error must have been distinctly "reassuring" to Professor Keith. Further, Professor Keith believes in the very high antiquity of man. He holds that man originated in pre-Pleistocene time, and, could it be proved that at the early period to which Piltdown man is assigned, a human being possessed of a comparatively large skull was already in existence, Professor Keith's views regarding the great antiquity of man would receive very strong support. Of a certainty, Professor Keith would not consciously allow his well-known views anent the high antiquity of man to influence him in reconstructing the Piltdown or any other skull; still, we are liable -all of us, and quite unconsciously-to find that which we desire or expect to find.

Precisely similar remarks apply to Dr. Smith Woodward and his reconstructions, except that his tendency to err lay in the opposite direction. Dr. Smith Woodward believes that man in origin, as also in development, is a creature of Pleistocene

time. Therefore, iff he could prove that human beings possessed of but meagre cranial capacity, say 1,070 cc. or a little more, were in existence at or about the end of the first half of the Pleistocene period, his views regarding the period of origin of man would be upheld, or, at least, would not be overthrown.

Moreover, it should be observed that, while Professor Keith's earlier estimate of the capacity of the Piltdown skull was larger than his more recent estimate (the figures being 1,500 oc. as against 1,397 oc.), Dr. Smith Woodward's earlier estimate was smaller than his more recent one. It is remarkable, and probably not without significance, that the errors in the earlier estimates of these two eminent scientists vary in consonance with their respective views regarding the period of man's origin.

How anyone can hold that only a slight error was made in the first reconstruction of the Piltdown skull I do not understand, nor can I concur when Professor G. Elliot Smith defends, as accurate, his preliminary report dealing with the endocranial cast. Professor G. Elliot Smith seems to assume that the errors of the first reconstruction affected the right side of the brain case only; the left, which is the side he described, being regarded as free from error. It seems clear, however, that a reconstruction carried out in accordance with Professor G. Elliot Smith's suggestions would so after Dr. Smith Woodward's reconstruction as to produce a considerable change in the position of the left parietal fragment, and incidentally a material change in the left side of the endocranial cast.

All told, I feel bound to agree with Professor Keith when he argues that the difference between his and Dr. Smith Woodward's reconstruction is not trifling and immaterial, but great and important—important because the difference between the two reconstructions applies not at all to the width of the brain case, only very slightly to its length, but almost entirely to its height. If Dr. Smith Woodward's early reconstruction be even approximately correct, then the Piltdown skull was comparatively small, and was flattened from above downward after the manner of the Neanderthal skull, although in other respects it is most unlike any Neanderthal skull at present known. Per contra, if Professor Keith's reconstruction be as near the truth as I believe it to be, then Piltdown man was possessed of a fairly large skull, a skull not only wide and long, but high also; a skull enclosing a brain possessed of a carebrum of goodly size, in short, a brain case comparable in many respects with that of modern man.

Should Professor Keith succeed in establishing his views regarding the size and general form of this skull, and should it be finally decided, as seems likely, that Piltdown man lived in early Pleistocene times, then we must perforce believe in the existence of man in Pliceene, if not in earlier, times.

T. E. NUTTALL.

REVIEWS.

Archæology.

Men of the Old Stone Age: Their Environment, Life, and Art. By Henry
Fairfield Osborn, LL.D., &c., Curator Emeritus of Vertebrate Palsontology in
the American Museum of Natural History. Londou: G. Bell and Sons, Ltd., 1916.
Pp. 545. Pls. VIII, Text Figures 268. Prile 20s. net.

If this had been a time of peace and we had appealed for an impartial judge to give a verdict on the various and diverse explanations which Europeans have given of the ancient races and cultures of their continent, it is more than probable that our choice would have fallen on the author of this work, Dr. Henry Fairfield Osborn. He has spent a busy lifetime in resurrecting from broken fragments' the fauna of past epochs and buried continents; he is a master in the art of reconstruction of past

worlds of living things. It is very evident from this book that he has taken infinite pains to weigh the evidence we have all put forward—the evidence of France, of Italy, of Belgium, of Germany, and of England-and his considered and reasoned verdict is for France-for Boule and for Breuil, with Germany as a bad second-Penck and Brückner being accepted as time-keepers. We do not grudge our colleagues of France their victory; they deserve it; their glorious country provided opportunities-that was their fortune; but they used them-that is their everlasting Out of chaos and welter of artifacts they have organised an orderly sequence of ancient human cultures - a sequence which increasing knowledge leads us to believe holds good for all western and central parts of Europe-and yet I cannot help thinking our judge has been over-persuaded by the clear, definite, logical manner in which our French colleagues have presented their case; the evidence produced by Rutot and Reid Moir of a continuous sequence of human flint cultures from the end of the Pliocene to our modern epoch is brushed aside, which cannot well be done by anyone who has studied and examined their records. Nor do we think that any work which is to deal fully with Men of the Old Stone Age can exclude, as Dr. Osborn has, his own continent. Has North America nothing to show of men of the Pleistocene?

It is the big broad lines in which the problems of ancient Europe are approached in a book like this which should engage the critic's attention, not the presentment of minor details. There are those of us who believe, on the evidence produced, that Europe has been the continued abiding place for mankind at least throughout the whole of the Pleistocene period, for which Dr. Osborn accepts a duration of half-amillion of years. There are others of us who look on the opening half or more of the Pleistocene period in Europe as sterile so far as man is conceined. That is the opinion Dr. Osborn favours; with Boule, he presses the rapes which have left us the rich records of the pre-Chellean, Chellean, and Acheulean cultures within the bounds of the third interglacial period-one to which he allows a period of some 100,000 years. Then, some 50,000 years ago, comes in the fourth great glaciation; the Mousterian culture appears, Nesaderthal men come on the scene. At the close of that period come a succession of pultures and a succession of races of the modern type. That is an orthodox and easily told version of our ancient story; it has the merit of its straightforward simplicity. As things fall out in this world they are rarely straightforward, and never, so far as concerns the rise and fall of mankind,

Dr. Osborn—as is the case with all who adopt this view, now wearing thread-bare—regards Pleistocene Europe as a stage—a stage where human races and human cultures appear, play their part, and then disappear. Behind the "flies" of this European Pleistocene stage is Asia; Asia is the huge dressing room in which all the "making up" is done—ancient Asia, of which we know almost nothing, and therefore can believe it capable of anything. In Asia the cultures are fashioned, and the new races of mankind are evolved to cut transitory figures on the ancient European stage. Why should evolution be a monopoly of Asia? Are we not too apt to solve our difficulties in a childish way, and make Asia a fairy factory of anthropological needs? Does the law of evolution not hold for the soil of Europe? In every one of these ancient European cultures we see evolution at work; from the dawn to the close of every cultural period we see that the fashion is always changing. Did those ancient races, who fashioned flints, undergo no change during the centuries which passed?

The story of Men of the Old Stone Age cannot be dissociated from the explanation we must give of how the world has come by its present diverse assemblage of races and cultures. We cannot hope to pierce the darkness of the

past except we carry with us the light given by a knowledge of our modern world and its races, and perhaps it is just the lack of that knowledge which has kept Dr. Osborn from appreciating at its worth our British evidence. For him Pitheean-thropus is exactly the evolutionary stage one would expect man to have reached in the first inter-glacial period of the Pielstocene; he sees no more difficulty in adding a few owness to the brain than to the liver. The problems of the liver and brain are infinitely different, as those who are acquainted with the elaborate structure and organisation of the brain well know; to me nothing less than a biological miracle could turn the brain of Pithecanthropus into the brain of Neanderthal man in the short space of two or three hundred thousand years. Nor, to do Dr. Osborn justice, does he really think this was done; he represents Pithecanthropus, Heidelberg man, Neanderthal man, and Piltdown man as branches which separated from the ancestral stock of modern races at the beginning of the Pleistocene period. For him humanity is a Pleistocene product. That is a bigger burden to throw on the short period of the Pleistocene than Dr. Osborn has fully fathomed.

Dr. Osborn can be very adroit in the handling of delicate problems. There are the questions relating to the people who left us the pre-Chellean, the Chellean, and Acheulean cultures. No definite answer is given, but indirect statements leave us in no doubt that in Dr. Osborn's opinion these cultures were fushioned by races of the Neanderthal type-races bridging the gap, not a big one, between the Heidelberg type of the second inter-glacial and the true Neanderthal type which we know inhabited a great part of Europe in the final glaciation, the time of the Mousterian culture. Now, it is a very remarkable circumstance that all the human remains which have been found shut down under pre-Mousterian deposits should invariably prove to be men of the modern type. Our French colleagues have rejected all such finds; they are out of place; their very occurrence breaks a leading palseoutological axiom-that Pleistocene forms cannot be identical with modern forms because evolution has always been at work; ancient and modern forms cannot possibly be identical forms. There is, for instance, the skeleton found at Galley Hill. The Galley Hill man is of the modern type. He may be rejected as impossible. Dr. Osborn has his own way of getting rid of him; the part of our 100-foot terrace in which he was found is, in his opinion, only of late Pleistocene date. The date of Galley Hill is Solutrean, not Chellean. In the section of the Thames valley (Fig. 8) the Galley Hill remains are indicated as coming from the middle (50-foot) terrace, not the upper (or 100-foot) one. Discoveries similar to those at Galley Hill, in the gravels of the Somme, Seine, and Italy are rejected as unworthy of credence. So far as Dr. Osborn is concerned, our ancestors do not appear on the stage until the glacial period is drawing to a close, some 25,000 years ago.

From a British point of view our author is all at sea as regards the discovery at Piltdown. For him the skull of Ecanthropus is that of an Englishman of the third interglacial period practising a pre-Chellean culture. The lower jaw is that of a chimpanzee. It is when we come to deal with the treatment of all the evidence relating to the discovery at Piltdown that our implicit faith in Dr. Osborn's judgment breaks down. He clearly has not realised a number of basal principles which all who deal with fossil finds of man and spes must ever bear in mind. We must expect, if evolution be true, to find forms in which ape and human characters are reproduced in various combinations. Suppose we had only found the forehead of Neanderthal man, and known nothing of his great brain and other human characteristics, who would have doubted the correctness of assigning that forehead to an anthropoid ape? Even with the whole calvaria before him Dr. King was inclined to place Neanderthal man amongst the apes—the man we now know to have buried and reverenced his dead. Who would have dared associate the calvaria of Pithecanthopus with the femur, if

that femur had been found in the same stratum but a mile or two distant? The calvaria would have been assigned to an ape-like man, the femur to a modern man. And now when the same problem comes up at Piltdown—with the jaw showing a texture exactly that of the skull, the same degree of fossilisation and of a corresponding size, with teeth as unlike chimpanzee teeth as teeth can well be—we have an authority like Dr. Osborn giving countenance to an error which is likely to bring a feeling of insecurity to those who are not qualified to form a judgment at first band. He cannot blame his British colleagues if they fail to give his judgment that due which his great services to paleontology should naturally demand from them.

On the other hand, one cannot but admire the thorough manner in which Dr. Osborn has applied himself to the problems of Ancient Europe, the labour he has taken to examine evidence at first hand and visit sites in person, and the clearness and precision he has stated and illustrated, the evidence and the conclusions he has drawn from that evidence. It is a book to read and to refer to, as good a book on the subject of Ancient Man as has yet appeared in the English language—in many senses it is the best—in spite of the fact that I think he has done less than justice to the work and opinions of his British colleagues.

There are minor details which one might have passed in review, but I shall mention only one of them. Dr. Osborn refers to the classic deposits at Hoxne, and to the arctic beds there. He definitely states that the arctic bed at Hoxne and that discovered in the Lea valley by Mr. Hazzeldine Warren are contemporary deposits-both post-Mousterian and of the fourth period of glaciation. Now, the arctic bed at Hoxne lies deep under the classic brick earth in which the first palsoliths were discovered by John Frere in the year 1797, and they are palscoliths of the Acheulean type, they belong to that culture and date. The Lea valley arctic bed belongs to a much later date-late paleolithic-according to its discoverer, Mr. Hazzeldine Warren. It is quite true that we have much to learn regarding the sequence and approximate dates of our English Pleistocene deposits, and at the present time our geologists and archeologists are modifying and extending their opinions regarding them, but I am certain that if Dr. Osborn will give them the attention he has given to those in France he will alter some of his conclusions in one of the many new editions into which his book will assuredly pass. A. KEITH.

Linguistics Wallis Budge.

Miscellaneous Coptic Texts in the Dialect of Upper Egypt. Edited, with English Translations, by E. A. Wallis Budge, M.A. 1216 pp., with 40 Plates and 20 Illustrations in the text. British Museum. 1915.

The chief interest of this book is for students of Eastern hagiology or of the Coptic language. The manuscripts are of the tenth and eleventh centuries, and consist of sermons preached on various occasions, some martyrdoms, and part of the Apocalypse of Paul. Coptic literature is chiefly religious and rather dull, and this book is no exception to the general rule, but in all Lives of Saints there are certain details which are of interest to the authropologist. The translation of each text is given in full, and, though very free in parts, is sufficiently accurate to make these details available. The unfortunate size and unwieldy shape of the book make it difficult to handle, and this, even more than the highly specialised nature of its contents, is likely to discourage the general reader. But there are some interesting points which deserve quotation. For instance, in the encomium on Theodore the Austolian, there is a curious illustration of the belief in the magical powers of pictures. The portraits of the two warrior-saints, Theodore and his cousin Claudius, were painted on tablets in the bedroom of the queen, the mother of Claudius.

These appear to have been considered a palladium against the enemy : "If a war " comes to pass between the Persians and the Romans, and they begin to fight with " one another, at once the hely Theodore seeds out his voice in the frontier of the " Romans, saying, 'Theodere the Anatolian and Claudius have come against you to " destroy you.' And at once the horses on which are mounted the portraits of the " two, which are painted in the bedroom of the queen, they neigh and rush forth "at once into the land of all the Persians, because of the name of the boly "Theodore the Anatolian and Claudius, before they fight." This is not the only instance of the picture of a Coptic saint which showed a warlike tendency. References to the ancient religion are occasionally found, as when Bishop Macedonius went at Aswan to a temple in which was a sacred hawk. The connection between the idel in the temple and the hawk is not made clear, but the hawk is called Paoute (God), and was served by a priest and his two sons. Macedonius was considered to have done a meritorious deed when he killed the hawk and flung its head into the altar fire. The archangel Michael appears to have been endowed with some of the characteristics of an ancient deity. The twelfth of the month Payni is his great day. On this day he dips his right wing three times into the Lake of Fire, and all the souls who can seize upon it are drawn out and delivered from torment. On the same day also he enters behind the veil which screens the Godhead from the sight of the dwellers in heaven; and when he emerges the angels know, by the robes he wears, whether the earth will be fertile or barron in the coming year. It is Michael who obtains from God the waters of the Nile, the dew, the rain, and the growth of the fruits of the earth. The name of the great archangal is also a charm against ill-luck and barrenness of fields and vineyards, for "the name of Michael shall be over them like strong armour."

M. A. MURRAY.

Babylon. King.

A History of Sumer and Akkad. By Leonard W. King. 8vo, 362 pp., 62 36 plates, 69 figures. Chatto. 1916. 18s.

This volume is an exact reprint of the first Issue in 1910, with only a slight difference in title page, imprint, and advertisement. Of the great merits of this summing up of the scattered materials of Mesopotamian history it is hardly needful to write. It is well known what valuable service Dr. King has rendered in arranging his three-volume history of that region, of which two volumes have now appeared. As an author who can deal with the whole information with first-rate knowledge and judgment, his work is essential both for the public and for students. In this reprint, however, we must regret that the publishers have not here provided that Dr. King should put his first volume in touch with his second. Some important discoveries in the last six years must modify the original issue, and to reprint literally is an injustice to the author. It will be useful to readers to note briefly the new positions which should be taken into account.

In the present volume of 1916, page 63, the dating of the first dynasty of Babylon is reduced to "about the middle of the twenty-first century B.C."; the date of 2232 B.C. given by Berossus is set aside, "it is safer to treat the date 2232 B.C. as without significance," as "purely arbitrary." Since that was written in 1910, Dr. King, in his volume on Babylon (1915), describes the astronomical results, from the risings of Venus, recorded on tablets, and states that these place the first dynasty of Babylon in 2225 B.C., and that this "coincides approximately with that deduced "for the beginning of the historical period in Berossus." This is not only a question of a detail of 180 years in an early history, it is a test case of the validity of

Oriental history as known to writers of the Greek age. Berossus was sneered at as without significance and arbitrary in his dates; moderns assumed that they certainly knew better than he did with all the survival of early historians before him. Now we have to acknowledge that our arguments were worthless, when we come to a little certain information. This must react on the status of other compilers, such as Manetho. Other discoveries affect one of the most important chapters of the book, that on the cultural influence of Sumer in Egypt. The carved ivery knife-handle which was acquired by the Louvre three years ago has given a firm basis for the contact of a civilisation which originated in Elam, and was in touch with the best period of the prehistoric age in Egypt. It shows that the east was far advanced before Egypt, and that the art of the slate palettes in Egypt originated from this Elamite school. This finally puts but of the question a purely indigenous development in Egypt, without foreign influence on the dynastic culture. There can be no question that the dynastic art was due to a fusion of an Oriental race with Egyptians. Another question to be reconsidered is the continuity of race in Egypt, on which Dr. King states that Dr. Elliot Smith "has demonstrated the lineal " descent of the dynastic from the pre-dynastic Egyptians." Now, from a much larger body of material, it has been shown (in Tarkhan II), that there was a continually increasing effect of the dynastic people on the prodynastic, that this culminated in the dynastic conquest, and that the mixed people gradually recovered the original climatic type subsequently. This accords with the artistic history shown by the ivory and slate carvings (Ascient Egypt, 1917, pp. 26-36). No one knows better than Dr. King how incersantly history is revised by fresh discovery, and we hope that his publisher will give him free scope in future reprints. W. M F. P.

Africa, West: Philosophy.

Dennett.

My Foruba Alphabet, By R. E. Dennett, Macmillan and Co., Ltd., St., Martin's Street, London, 1916.

This book is not a treatise on Yoruba phonetics, and although it proposes (in the first three pages) a new method of writing Yoruba, by using double letters and prefixing hyphens to get rid of certain detted vowels and consonants, it has little to do with Yoruba philology, and a great deal to do with Yoruba (or is it Mr. Dennett's?) philosophy.

It is written to direct "the thoughts of Yoruba teachers, students, and children "into such channels as shall conduce to an accurate and intelligent appreciation of "the philosophy in their truly beautiful language." In other words, the author proposes to unveil, analyse, and apply to the Yoruba language the Great Universal Order. This great universal order comprises the eight great elemental factors: 1, Authority; 2, Morality; 3, Potentiality; 4, Volition; 5, Vitalization; 6, Reciprocity; 7, Capacity; 8, Effectivity.

After a statement as to the religious and spiritual influence permeating the Yoruba people, shown by their devotion to religious performances and strivings for communion with Ollorun, the great owner of the heavens and the Great Universal Spirit, the author suggests that as certain words in Yoruba differ only in accent and intonation as, e.g., emi, mi (I), mi (to breathe), emi (breath), emmi (life), mi (to agitate), "it is quite conceivable that in the minds of the early progenitors "of the Yoruba race there may have prevailed the idea that all these elements "were essential to the existence of a perfect being," i.e., the first person—emi or mi (I).

He then shows that the factors of the Great Universal Order enumerated are built up from the Yoraba vowel sounds, in the order of the Yoraba

personal pronouns, by means of the Yoraba consonants, in certain natural groups. Thus:-

Pronouns.

Consonants.

	*******	The second secon
1. Authority	- i, emi (I) ·	c, f, f (v), Nature's aspirates.
2. Morality -	- u, or o, inve (Thou)	I, m, n, Liquids.
3. Potentiality	- '0, or p, on (He)	έλ, s, or σ, Sibilanta.
4. Volition	- a, iwa (Passion) awa (We)	g, k, gb, or q, Gutturals.
5. Vitalization	- a, iwa (Passion) awa (We)	t, d, w, Dentals.
6. Reciprocity	- 'e, ennyin (You)	y, k, j, Exhaled aspirates.
7. Capacity	- a, awon (They)	b, r, p, Labials.
8. Effectivity	- (ere) the new I, emi	Becomes the head of a new generation.

These headings elaborated with seriatim in their relation to the Yoruba vocabulary. Thus, ile (sarth), omi (water), mu (to imbibe), olohun (the sea deity), ina (fire), ma Nama Na (lightning), the verb na (to chasten or chastise) are said to show that "the liquids are expressive of and closely allied to Morality." The author then states that Genesis, the symbols found in the Yoruba sacred groves, and the Yoruba letters are analogous in their conformity with the Elemental Factors and Great Universal Order. The Lord's prayer also conforms, so does the English language. The book ends here, much to one's disappointment, for there surely must be some other things which agree with the Great Universal Order.

Mr. Dennett does not claim for the Yoruba any knowledge of this wonderful philosophy hidden in the alphabet of their language. It is, in fact, a white man's conception of what the black man may (or may not) think of the arrangement of the universe, and has no native authority. It may be relegated to the same category as Torrend's relation of the Bantu noun-classes to the seven days of creation as stated in the first chapter of Genesis. But Mr. Dennett's theory se non è vero è ben trovato, and will serve as an admirable example of what a plausible case may be made out for any theory whatever by ingenuity in the way of linguistic comparisons. SIDNEY H. RAY.

ANTHROPOLOGICAL NOTE.

Accessions to the Library of the Royal Anyheopological Institute. 64

(Donor indicated in parentheses.)

Burmese Textiles from the Shan and Kachin Districts. By Laura E. Start, Bankfield Museum Notes. Second series, No. 7. 104 × 75. 51 pp. 40 Illustration. F. King & Sons, Ltd., Halifax. 3s. 6d. (H. Ling Roth, Esq.)

Panjab Castes: Being a Reprint of the Chapter on the Races, Castes, and Tribes of the People in the Report on the Census of the Panjab published in 1883, by the late Sir Denzil Ibbetson, K.C.S.I. 10 × 74. 338 pp. Superintendent, Government Printing, 1916. 6s. (Chief Secretary to Gövernment.)

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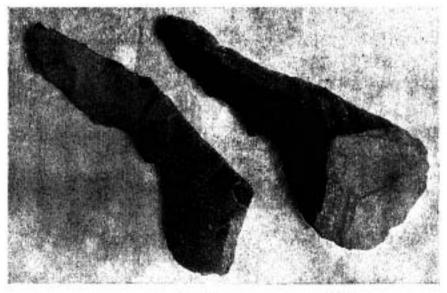
ORIGINAL ARTICLES.

Archæology. With Plate F. Lavard Finger Grips: An Interpretation of Worked Hollows found on

many Surface Flints. By Nina F. Layard, F.I.S.

Among the large number of flint tools gathered from the ploughed fields of Norfolk and Suffolk, collectors have puzzled over many eccentric forms, the purpose of which it is difficult to determine. Some of these, notwithstanding an apparent want of design, show careful secondary work, and it is the position in which this work occurs on the tools that has defied explanation. Perhaps the most striking instances are those which show a series of hollows placed one beside the other for the greater part of the length of the implement. These have all the appearance of hollow scrapers, and are worked out in the same way, but that this is not their true purpose, an examination of these interesting examples proves conclusively.,

It was while handling one of these unusual forms, and vaguely wondering which was the working end of the tool (Fig. 5), that my hand accidentally fell into the position shown on Plate F, Fig. 1. The thumb rested on the flattened back of the



Fre A.

Fig. 6.

tool, and when the fingers were raised they were found to have fitted naturally into the grooves below, evidently prepared to receive them.

A further examination of the implement showed that the knife-like blade was carefully worked to an edge on either side. To prevent injury to the thumb the back of the tool had been beaten, thus removing the sharp edge (Fig. 5), while the sloping of the handle completed a design which resulted in an implement with a comfortable and powerful hand-grasp (Pinte F, Fig. 1).

This cleverly contrived tool proved a key to the correct handling of many others. Looking over my collection a second example, equal in merit, soon came to light. This was a long-handled scraper, on the right side of which finger grips had been skilfully worked out (Fig. 6, and Plate F, Fig. 2). The implement is triangular in section, the dorsal ridge rising to a height of 22 mm, in the centre, thus affording a convenient grasp between thumb and fingers (Plate F, Fig. 3). The back is beaten to blunt the edge, and so avoid injury to the palm of the hand (see Fig. 6), and where the fingers encircle the handle and return with their topjoints resting on the left edge of the tool, the same careful battering of the sharp rim is found (Plate F, Fig. 2).

Another striking example of finger grips, accompanied by beautiful adaptation to the hand generally, is shown on Plate F, Fig. 4. Again the fingers fit perfectly into the hollows nicked out for them, while the butt of the tool is shaped to follow the lines of the half-closed hand. By one purposeful blow a large flake has been removed at the point where the tool rests against the ball of the thumb, while a groove has been formed to accommodate the tip of the thumb (Fig. 7).

Space will not allow of the introduction of more than one other specimen of the same kind. This is another tool similar in general design to the last, but also having lost its point. The working out of the hollows is exceptionally fine, as the, thickness of the tool on the worked edge is not less than 7 mm., making the task of removing the flakes with perfect regularity extremely difficult. Both this and the last-mentioned implement were kindly added to my collection by Professor Barnes. The first was found on the Kent plateau, and the other came from



PIG. 7.-PLIST DIBBLER WITH HAND IN POSITION.

Croxley Gravel, Rickmansworth. In this short paper I have only dealt with one of the many and varied methods employed by the flint-worker to insure a secure hold on his tool without the aid of a handle. Other devices equally skilful, and indeed requiring even more ingenuity, are found in other types of which I have a considerable collection. An account of these I hope to publish shortly.

NINA F. LAYARD.

DESCRIPTIONS OF PLATE AND ILLUSTRATIONS IN THE TEXT.

PLATE F.

Fig. 1.-Flint hide-cutter with hand in position.

Fig. 2.—Long-handled scraper (under surface showing hollows).

Fig. 3.-Long-handled scraper, with fingers in the hollow and thumb in position.

Fig. 4.-Flint dibbler from Kentish plateau, showing finger hollows.

ILLUSTRATIONS IN TEXT.

Fig. 5.-Flint hide-cutter, showing finger hollows-

Fig. 6.-Long-bandled flint scraper, showing finger hollows.

Fig. 7 .- Flint dibbler, with hand in position.

Punjab. Rose. Muhammadan Betrothal Observances in the Punjab. By H. A. 66

SECTION 3 .- BETROTHAL AS AN USAGE AND AS A RITE.

In the Western Punjab Muhammadans tend to assimilate the betrothal to the regular nikāh, or wedding. This is especially the case in Hazāra. In that district some people celebrate the mangema only at betrothal, others solemnise the nikāh simultaneously with it, but without fixing the amount of the dower. That appears to be fixed subsequently, and the nikāh is regarded as irrevocable when the amount of dower has been fixed. In Harīpur tahsīl, after the duā-i-kkair, the ritual of offer and acceptance is solemnised at the betrothal. In Attock tahsīl, too, a mullāh officiates at this ceremony.

In the Rajanpur tahail of Dera Ghazi Khan the position is this: When persons of the same tribe make a betrothal by exchange, the nikāh is not performed at the betrothal, but the mangai is performed, and the duā-i-khair is recited in connection therewith. But if a betrothal is made in consideration of a cash payment the nikāh is solemnised simultaneously with the mangai. The amount paid varies from Rs. 100 to 300. But elsewhere it is rare to find betrothal regarded as a religious rite, though occasionally the niyat khair, or invocation of a blessing, is invoked by the Qāzi's reciting the duā-i-fatih-khair, as in Ferozepur. In that district this is the only essemony at a betrothal, the boy's father visiting the bride's and receiving a red khas, or mutāhā, after the niyat khair, while the boy does not accompany his party. In Mandi the following times are considered inauspicious for a betrothal, and in fixing the date for it a Qāzī is consulted:—

(1) The first ten days of the month of Muharram.

- (2) The month between the Id-ul-Fitr and the Id-ul-Zuhā.
- (3) The month of Jamādi-us-sāul.
- (4) The last day of every month.
- (5) The 3rd, 8th, 13th, and 18th of every month.

Auspicious days for a betrothal are :--

- (1) The 7th, 11th, 14th, 25th, and 27th of every mouth.
- (2) All days except the 3rd, 8th, 13th, and 18th.

But this custom appears to be confined to that State, for in the adjacent district of Hoshiarpur any date may be fixed for the betrothal, and at most a moulowi is called for the miyat khair. In Dasiiya tabsil any date of the lunar month is fixed. This is called parna, and on it a party of four at least visits the bride's house with presents, which vary according to the means of the parties. Among the Pathans, called Wilayati and Muhammadans of Kangra generally, betrothal is styled bale, or "assent." Among the Saddozai and Qizzilbash Pathans of Hoshiarpur, for instance, the bale simply consists in a visit by the boy's friends to the girl's father and a formal acceptance of the proposed match. The boy himself does not take part in any of the ecremonies before his wedding, though these are rather elaborate, and include the shiring khort (sweet-eating) and rakht-burani (cloth-cutting). date after the bale the boy's father, accompanied by some of his family, takes some sweatment, pieces of silk and rich cloth, unsewn and uncut, for the bride, but ornaments are not sent till the eve of the wedding. This caremony is performed with some little éclat. The sweetmeat, which is always a mixture of patāsha, nugal, and ilaichidana, is arranged in trays carried by menials, who form a procession. Before them goes a band. The ladies of the boy's family follow in close carriages, Sometimes fireworks are also used. When this procession arrives at the girl's house the boy's mother or some elderly relative puts a ring on the bride's right-hand

finger and says, "bismillāh" (by the name of God). She then throws a shawl round ber shoulders. After this she cuts the cloth with scissors, repeating "bismillāh." Congratulations to both the parties follow, and sweetment is distributed among the women inside the house as well as among the men outside. Finally, the date of the wedding is decided upon and publicly announced.

In Kangra the bale is a little more formal, and it is also followed by similar observances. The boy's father, with some respectable elders, goes to the girl's house on the 11th, 17th, 27th or 29th of the month. The girl's father also assembles some men at his house before their arrival, and soon after it he distributes sweetmeats, such as patāshas, giving a plateful of sugar with his own hands to the boy's father, and congratulations are exchanged. The giving of the sweetmeats shows that the girl's father has agreed to give his daughter to the boy. This ceremony is called sharfi khori, and females take no part in it. On this day, and sometimes on the next day too, the boy's father sends sweetmeats and fresh fruit to the girl. This sweetment is called majmā razā. The fruit is distributed by the girl's parents among their relatives. Thereafter (till the date of betrothal) on each Id-ul-Fitz the boy's parents send some mehndi and food to the girl, and a he-goat or ram is also sent to her on each Id-ul-zuhā. The animal is painted with mekadi and a silver hansli put round its neck. It is sacrificed by the girl's parents, On each last Wednesday of the month of Safar, 20 silver rings and a gold ring, with a suit of clothes and some mekndi, are sent by the boy's parents to the girl's. The silver rings are meant for her friends and the gold one for the girl herself. On the Shab Barat fireworks are also sent for the girl. These practices are kept up till the nikah, and there is no limit to the period intervening between the betrothal and the wedding.

The date of the mikāk is fixed in consultation. First of all the date of the rakkat bari, or cutting of the clothes, is settled. The boy's parents take even suits of silk clothes to the girl's house. These clothes are carried by servants on their heads. A pair of laced shoes is also taken. The first cloth for the bride is cut by the oldest and most respected matron of the family. The girl's parents supply the boy's with food for the night at the rakkat bari, and the men of his party depart after taking it. This ceremony is performed ten or eleven days before the wedding.

The auspicious dates for a betrothal are variously given. In the Abbottäbäd tahsil of Hazāra very few days are unlacky, and auspicious dates are the 1st, 2nd, 4th, 5th, 6th, 7th, 9th, 10th, 11th, 12th, 14th, 15th, 16th, 17th, 19th, 20th, 21st, 22nd, 24th to 27th, 29th, and 30th. But one list from Rājanpur, in Dera Ghazi Khan, omits the 2nd, 6th, 8th, 9th, 10th, 15th, 16th, 19th, 20th, 22nd, 25th, 26th, and 30th, while in the Leiāh tahsīl, of Mīšawālī, only the 7th, 11th, 14th, 24th, 25th, or 27th day of the moon is considered really prosperous, though, excepting the ten days of Ashura, all other days of the year are admissible, whether lucky or not, for performing mangnā.

In Ferozepur no regard is paid to the date of the month, but the boy's party should reach the girl's bouse on a Thursday night.

In Loharu the usages in betrothal are typical of those in vogue in the southeast Panjab. In that State, betrothal (sagái) is never solemnised on the 3rd, 13th, 23rd, 8th, 18th, or 28th of a lunar month.

The bridegroom (bendhā) only accompanies his father and kinsmen to the house of the bride (bendhāns) if specially desired to do so by the bride's father. The boy's father then presents Rs. 35 in cash and a cocoanut in a vessel, together with 5½ sers of sugar, one ser of henna, and a silk cloth, which are put in the bride's lap—an observance called god bharnā (literally, "to fill the lap"). Then the girl's father gives the boy some cloth, a rupee, and a cocoaaut, with clothes for himself

and his mother. Next follows the shukarana, or thank-offering, a feast of rice, coarse sugar, and ghi, given to the boy's party, during which the girl's kinswomen fling insults (sithuian) at them.

The betrothal ceremonies in vogue among the Muhammadans of the Lamma

tract in Bahāwalpur are described below :-

Betrothal is called mangaán or mangassa. On the date fixed for the betrothal the putreta or boy's father's party pay a visit to the dheta or girl's father, and this visit must be paid at night and on the 1st, 5th, 7th, 11th, 14th, 17th, 19th, 21st, 25th, 27th, or 29th of the lunar month. The bridegroom accompanies the party, which takes a quantity of tapásás (sugar cakes) with them, and on arriving at the girl's house the duá-i-fátiha hhair or nigat-khair is observed, the ceremony being begun by the person who arranged the betrothal. After this the parties exchange congratulations and the bridegroom is given a lungi. The boy's father usually distributes the tapásás, while the bride's father entertains them with milk. The bridegroom's party returns home the same night. Subsequently a party of women visit the girl's father on behalf of the bridegroom's father, taking with them tapássás and a trewar, comprising a bochhan, in which are tied some coius (varying from 4 annae to Rs. 25), fruit weighing from 2½ páos to 5 sers, a bracelet, a set of baugles and a ring (or pathi-mundri), and these ornaments and clothes are put on the bride by the women.

In well-to-do families a woman who makes bangles accompanies the party to the bride's house and puts glass or ivory bangles on her. In other cases the bride is taken next day to a shop and the bangles are bought and put on there. After this the nose of the bride is bored, and as a compensation for the pain she is given 1\frac{1}{4} chhatahs or 1\frac{1}{4} phos of sugar-candy.† Finally the visitors are feasted with choba (rice or bread with ghi and sugar) by the bride's father, but nothing that has been cut with a knife, such as meat, is given them.‡ This caremony is termed nath-suré.

SECTION 4 .- USAGES SUBSEQUENT TO BETROTHAL AND PRIOR TO MARRIAGE.

Chandranan.—On the first day on which the new moon is seen in the lunar month following the betrethal the bridegroom visits his father in-law in order to congratulate him on the new moon, and takes his meals in his house. This is termed chandranan khaluan. The bridegroom drops from Re. 1 to Rs. 10, according to his means, in the plate in which food is given him, and his father-in-law in return gives him a ring. This usage is virtually confined to Bahāwalpur, being expressly non-existent or obsolete in almost every other part of the Punjab.

After the chandranan on both the Ids, on the Ashura (the 10th of Muharram), the Shab-barat, and the last Wednesday in Safara the boy's father sends uncooked food (rice, ghi, sugar, &c.) to the bride. Here again nothing that has been cut may be sent, and this rule is observed even on the Baqr-Id day (the festival on which sheep, &c., are sacrificed).

But in Derä Ghäzi Khān only a rupee is sent to the bride on the first Id. No uncooked food is sent her on the Bakar Id, when her home is not far from the boy's.

In Miānwāli, on the first Id-ul-Fitr, after the mangewa the boy's father sends the bride a bhockhan and a silk kurtā, some rice, ghī, sugar, &c. Beside these

^{*} A prione i of a ser.

[†] Bound Mithankot, in Dera Ghāzi Khān, the bride's nose is bored by the boy's kinswomen, and they give her the sugar-candy, the one who actually performs the operation giving twice as much as the others.

[‡] Round Mithanket this restriction is only imposed on the bride.

[§] In the Jampur tahail of Deck Ghasi Khan uncooked food is sent on the fds, Maharram days, and Shab Barat, by the boy's party, but not on the last Wednesday of the month of Safar.

articles and clothes are sent on each Id or festival after the mangewā. This is termed warenā or sanbhāl bhejnā, to send a support or pledge.*

After the betrothal various social observances take place, but however costly they may be, few have any religious or ritual significance. For example, among the Jadüns and in the Abbottabad tahsil of Hazāra uncooked food is sent to the girl on each Id and Shab Barüt after the betrothal. This usage is very wide-spread, but the customs as to what is sent vary considerably. Thus, in Peshäwar, well-to-do people send clothes and ornaments.

In Gujrānwālā on the Id day after the mangnī the boy's party goes to the girl's house with ornaments and clothes, which are put on the girl on that auspicious day. Even poor people take a suit of clothes and silver ornaments worth Rs. 20 to 50, while the rich send silk clothes and ornaments coeting as much as Rs. 500 to 2,000. Congratulations are exchanged between the parties, and sweets distributed on this occasion. This custom is, however, not in vogue among cultivators. It is confined to the higher castes living in towns.†

Kawārā kā sāwanā.—In Hoshiārpur the presents thus sent are called Īdī and Shab-barāti. In Mandī on any festival day, such as the Īd or Niāz, and at any marriage in the girl's family after his betrothal, the boy is invited and feasted with rich food. This is called hawār ha sāwanā. On the other hand, among respectable families, the girl is supplied with clothes, etc., till her nikāk.

A similar custom exists in Lohāru. In that State biḍri is a present of sweets, etc. (including clothes, if they can be afforded), sent to the girl by the boy's father in every festival between the bethrothal and the wedding. If no ornaments or clothes were given to the girl on the day of the mangni they are sent with the first biḍri. In return the girl's parents also send a biḍri to the boy. If the Thj festival of the Hindus in Lāma happens to fall between the betrothal and the wedding Muhammadans send sandhāri to the bride. This consists of khajārs (sweets shaped like dates), made of wheat flour and coarse sugar fried in oil, together with a suit of clothes for the girl.

In the Pindi Ghob tabail, on the day after the betrothal, the females, on behalf of the boy's father, visit the girl's house, taking with them dried dates, mand thread, and cash for her. This is called gad. The boy also visits the girl's house on the second or third day, his mother-in-law gives him a gold or silver finger-ring or some cash. The girl's other relations also give him money.

In Peshawar city, at an undefined time after the mangena, some of the boy's kinswomen go to the bride's house for the milni, as it is called. They take sweet-meats with them, and the bride's parents serve them with boiled rice and sugar, called chebba. This ceremony is performed during the day, and the women return home by night. They drop from Re. 1 to Rs. 5 into the vessel from which they are given the rice. At every festival day the boy's parents also send the girl rice and sugar, and in return for this they are given a chadar or dopatta.

But in Sialkot the milni is not carried out by the womenfolk at all. In that district some time after the betrothal and before the weiding, the fathers of the boy

[&]quot; See Note B at end,

[†] This usage is subject, of course, to endless variations, not only in different localities, but also in different castes. Thus in Ferosepur, after the mangada, food, clothes, and ornaments are sent to the bride on the Id. Among Bodhis the boy's mother goes with these articles herself. The ornaments are a hazaki, bangles, a gokkirū (all of silver), and clothes—a gown and a hartā. Sayyida send 6 serv of rice, a rupee, for the price of ghi, sugar, shoes, tronsers, a laced hartā, and departā, hangles, and karyās. Bājputs send all the above except the rice, and in return the bride's father sends a lengt, hartā, turban, shoes, and a finger ring for the boy on the last Wednesday. Among Arains the boy's father sends two serv of rice and one of sugar. Half of this is sent by the beide's father in return.

and the girl meet together, and this is called milnt. The boy's father on this occasion sends the girl some ornaments and clothes, which are put on her. In return her father may give the boy's father valuable clothes and ornaments as well as a shebuffalo or a mare, but this is not generally done.

In Hazāra the milnī appears to be called pair gela. Directly after the betrothal, on the return of the boy's party from the girl's house, his kinswomen, with other females of the village, visit the girl's mother, taking with them drums and singing songs on their way. They also take sweetened bread fried in oil. This is called pair gela. The bride's kinswomen return the visit in a similar way. By this it is intended that if a birth or death takes place in either of the two families their womenfolk can take part in the marriage festivities or the mourning rites.

The meaning of the term pair gela is not very clear. In Attock tabell it is thus described: After the conclusion of the betrothal, on an Id day, the boy's mother, together with thirty or forty other females, the boy, and his sarbālās, visit the girl's mother by day. She takes with her clothes, sweetmeats, and parched grain, and presents them to the girl's mother, who distributes them among those present and dismisses her female visitors with presents of clothes, but the boy and his sarbālās stay on for four or five days. On his departure his father-in-law to-be gives him clothes and a ring. Sometimes the sarbālās are also given clothes. This is called pair gela. On the first Id the boy's mother also takes mebndi, jaggery, rice, and clothes for the girl, and this is repeated on all subsequent Ids.

But in the Haripur tabell of this district it is said that on the third day, or some time afterwards, the females of the boy's family pay a visit by way of pair gela to the girl's mother, taking with them ornaments, &c. On their return the girl's parents give them clothes, &c.

In Minwali a similar usage is called pairā ohhornā. After the betrothal the boy goes to his father-in-law's house, and after taking food there, he drops from Re. 1 to Rs. 5 into the dish in which his dinner was served. His mother-in-law to-be then gives him a gold or silver ring in return.

NOTES.

A .- Among the Pathans of Hoshiarpur the betrothal has something of a ritual It is fixed for any luner date. A maulavi attends it and the niyat-i-Ahair is observed twice, once when the girl's father solemnly declares that he has given his daughter in marriage in the name of the Almighty, and once again after it, when congratulations are exchanged. The bride's father, however, gives the boy's some dried dates and sugar "by way of shagun," and thus the contract becomes irrevocable. This is followed by the mishāmi, also fixed on a lunar date. The boy's party with their kamins, some presents, including clothes and cash varying from Rs. 11 to 21, for the bride, visit her father. Drums are besten to add to the eclat of the observance. The gifts to be made are not fixed, but the nishani is followed by the interchange of money and other gifts. The bride is in mayan for fifteen or as many as forty days. The wedding party starts so as to reach the bride's house at or a little after the zuår prayer. It takes with it a satpura or basket containing seven things, such as a comb, scented oil, etc., besides ornaments, clothes, and other gifts. These gifts are called wari or bart. The milui is observed in much the usual way. After it the wedding goes to the house prepared for its reception, but a kamin stands in the way to exact his lag (called publa or "first") of a rupee. Then the barber brings them water to wash their hands and the boy's father puts Rs. 7 to 21 in the basin. This exaction is called dad (? second). When they begin to cat a that or katora is set before the boy, and in it he puts three handfuls of rice, etc., which are given to the bride to eat. Thus the mikak is duly solemnised and the bride

taken away, but she returns to her parents on the third day. Finally a day is fixed for the baskarta, when the husband's kinsmen bring her back to his home.

The trend of custom to make betrothal a marriage or as binding as a marriage finds an interesting and instructive parallel in the old doctrine of espousals in English law. An espousal, properly speaking, was a promise of marriage which was to take place at some future time, the man saying to the woman, "I will take you for my wife." Espousal was either simple as made by a mere promise, or it could he ratified by a pledge, such as a ring. To make it good proof of consent was required, but the mere gift of a ring was not sufficient unless it was expressed to be given by way of esponsal. Any person over seven was competent to esponse and even if under that ago the espousal held good provided it were ratified later by a regular consent. Further, a third party could act in this capacity, as a father for his son, a mother for her daughter, an uncle for a nephew, and a tutor for his pupil, but such espousals by proxy had no legal effect unless the party affected, on arriving at the age of puberty, signified his or her consent to the contract. This "option of puberty" thus differed somewhat from the rule in Muhammadan law inasmuch as the contract was regarded as only made by a proxy and not by a guardian, and had to be ratified at puberty. Apparently it did not hold good unless expressly ratified and the parties had not merely the option of repudiating it.

When one was esponsed to another a day was fixed for the wedding unless the esponsal was conditional on some event which might never take place, and in that case the expousal had no effect. But if it did take place and in all cases of anconditional espousal neither party could make a fresh contract. Either party had s right to sue to compel the other to celebrate the marriage, and though the spiritual courts as a rule would not force marriage upon an unwilling party, they inflicted penance on the one which refused to carry out the contract. Cohabitation after espousals made the parties man and wife without any wedding. But if a party made a second contract of esponsal and cohabited with the other party to the second contract the first did not hold good. Espousals created spiritual kinship with all its attendant prohibitions on marriage within certain degrees. And "present espousals" operated as a marriage. But espousale might be dissolved by mutual consent or by the court, by one party's entering into a religious life, by fornication, heresy, lapse of time (three years if no day were specified), or by letting the day fixed go by, by failure of a condition, by deformity or a contagious disorder, by a deadly feud springing up between the parties or even by asperity of manners. The evils which such a law naturally fostered were tolerated for several centuries until the passing of Lord Hardwicke's Act in 1753 abolished espousals and clandestine marriages."

B.—The term marsuā clearly means a "pledge" or "ratification," and it is translated by santhat tlejuā, which must mean "to send a support or pledge." Elsewhere a rite called waruā, lit. "to marry," is in vogue. Thus after a betrothal in Gujrānwālā, if desired by the girl's parents, the boy's party goes to them with a kurtā dopaṭṭā, trousers, shoes, silver karyān, bangles, kangan and 101 ladāās. On arrival they are treated in the same manner as at the mangai and served with the same food. The ornaments and the clothes are put on the bride, a rupes or two and some tapāshās being also given her. The ladāās are distributed by the girl's father among his near kin. The lāgās of both parties also get their dues as at the berothal. Each female, too, is given a kurtā and dopaṭṭa and each male a lungā and a turban. This is called warnā. But this usage is not general as it depends on the pecuniary position of the parties.

^{*} A. R. Cleveland, Woman under the English Lane, pp. 128-9 and 218.

This ceremony is also performed by some tribes in Jullandar after the mangai. The men of the boy's party visit the girl's father, taking with them ornaments (chanak, pkūl, kanalt and jkānjharān) and sometimes clothes as well. The bridegroom does not accompany them. A cordial reception is given them by the girl's party, and when they depart they are given a gold ring and some clothes for the boy. This is called warnā chaphānā.* This ceremony is dying out among the educated classes. In addition the boy's parents send uncooked food such as rice, jaggery, mehadī, mault, and sometimes a suit of clothes as well as some cash on each and every festival day.

In Gurdaspur the warna is performed five or six months after the kurmai.

The boy's mother and other females go to the bride and dress her in trousers.

H. A. ROSE.

Sudan.

Seligman.

A Bongo Funerary Figure. By C. G. Seligman, M.D.

The carved wooden figure here illustrated is now in the museum of the Gordon College, Khartum. It was taken from the grave of a Bongo chief who

was said to have died prior to the Dervish invasion of the Bahr el Ghazal under The natives Kheirmallah. professed to have forgotten the name of the chief, but he was said to have been the head "sheikh" of the tribe. The figure, which is made from the wood of the tree called abw scrag, is said to have been found leaning against a tree on the El Atessh road from Wau to Tamboras, some twelve miles south of Fort Ukanda.

Previous to the discovery of the figure the donor, whose identity is unfortunately doubtful, came across some freshly-made graves in a mixed Bongo-Bolando (? Bongo-Belanda) village, close to Rafili. These graves were circular and surrounded by a number of stout posts driven into the ground, some 3 feet 6 inches



CARVED PUNERARY FIGURE IN THE BUSEUM OF GORDON COLLEGE, KHARTUM.

to 4 feet being left protruding from the ground, while the central space between the posts had been filled up with broken stones. The graves were similarly constructed for both sexes, but at the eastern part of the circle surrounding a man's grave a post, roughly carved to represent a man, was erected, and on the base of this post were a number of horizontal notches, said to be the tally of the elephant,

^{*} No such substantive as mersa is given in the Panjabi Dictionary.

buffalo, leopard, lion, hippopotamus, and crocodile the deceased had slain; but it was not discovered whether these notches were arranged in any particular sequence as regards species of animals or not. One old man in this village, formerly a "chief," was having his tomb figure prepared in anticipation of his death. The women's graves had no carved figures, but a clay cooking-pot had been placed on the top of the heap of stones. It is recorded that males were buried in a recumbent position on the right side, the head resting on the right hand, the knees drawn up, with the face towards the east; women, on the other hand, were buried facing the west.

The total height of the post here illustrated is 82 inches, the carved portion measuring 38 inches. This is about the size of the figures round a Bongo grave illustrated by Schweinfurth (Artes Africana, Plate VIII), and exceeds that of a Bongo funerary effigy of a woman (about 27 inches in height), also figured by Schweinfurth. The four Bari Ahnenfiguren in the Vienna Museum are also considerably smaller than the specimen here figured.

C. G. SELIGMAN.

Ethnography.

Routledge.

The Northern Bantu. By Scoresby Routledge.

In Man, 1917, 35, your reviewer writes as follows:—"Like the Kikuyu, UC
" the Bagesu do not bury the dead." Speaking from knowledge acquired by long and intimate residence amongst this people, I would point out that the people of Kikuyu speak of themselves as Akikuyu.

Though the Akiknyu in most cases do not bury their dead, still, amongst them, burial is the mosd of the wealthy, and of the respected. Custom decrees who shall, who shall not, be buried. So, too, it lays down correct exemonial, and practical procedure.

The burial of children, and the digging up of bones, as quoted by your reviewer, is entirely opposed to all I saw and heard in Kikuyu. The mere idea would be repugnant.

SCORESBY ROUTLEDGE.

Music. .

Thomas.

Tone and Melody. By N. W. Thomas.

In 1911 I recorded with the help of Father Strub, of the Roman Catholic Mission, Agenebode, Southern Nigeria, six Yoruba and three Kukuruku songs, as nearly as they can be represented by our notation, and also the normal rise and fall of the tones in the spoken words. In a few cases, notably eba in the last line, the tones were accidentally omitted in my notes, and as I understood no Yoruba at the time, some of the words and much of the translation are uncertain. As, however, this note is intended as a contribution to the question of the relation of tone to melody, on which there are, so far as I know, no other data, I have not attempted to revise them. In the eighth song I am uncertain whether the low tone on me is the singer's normal low tone or a specially deep one, as I had not at the time realised that the intermediate tones between high and low were so numerous.

From the comparison of melody and tone it is clear that in the examples recorded there is often hardly any connection between them, though the last four notes of No. 8 show the required tone fall, of course, much reduced; the close of No. 5, and five out of seven notes in No. 2, also agree; in No. 1 the rise and fall in individual words is shown, but not the sentence melody.

The small numbers above the vowels show the tones-1 is high, 4 low.



REVIEWS.

Ethnography.

Cochrane.

The Shans: By W. W. Cochrane. Vol. I. Rangoon: Superintendent, Government Printing, Burms, 1915. Pp. xx + 228.

This is the first of two volumes, and it deals with the Shans mainly from the points of view of their history, language, and religion, leaving other matters to be discussed in the volume that is to follow. The work was written at the instance of the Lieutenant-Governor of Burma, and forms part of a series of books on the various races of the Indian Empire. The author is an American missionary, who has lived and worked for many years among the people he describes, and is thoroughly familiar with their customs, language, and literature.

The Shans of the Burmese Shan States are a branch of the great Tai family, and for that reason the author has deemed it necessary—as no doubt it was—to say a good deal about the Tai family as a whole, particularly as regards its origin and anteredents. He has endeavoured, with some success, to unravel the somewhat tangled skein of Tai history; and if there is much that inevitably remains doubtful and obscure, at any rate he has made it plain that the earliest traceable habitat of that people was in Southern and Contral China, from whence they spread in various migrations into different portions of the Indo-Chinese peninsula. It would seem that in Southern China a very considerable part of the whole population to this day is either Tai or a mixture of Tai and Chinese. The two races have apparently become blended, and much that passes for purely Chieses is really Tai, or, at least, mongret.

Of course, it is no easy task to apportion how much of the elements in blends of this sort is due to each set of ancestors. Anthropologically, the Chinese and the Tai are not very far apart. Linguistically, the two have much in common, and one cannot say offhand whether this is due to berrowing (either mutual or unilateral), or whether the two linguistic stocks descend from a common source. The prevailing view is that both factors have been at work, and that appears also to be Mr. Cochrane's opinion. But it must be confessed that his chapter on language is, on the whole, the least satisfactory part of the book. He compares lists of words in Shau, Karen, Palaung, and Burmese, and arrives at a similar conclusion as regards the ultimate relationship of all these very different languages and the families which they severally represent. His method, however, is neither scientific nor convincing. The mere comparison of individual words in different languages is incapable of leading to any positive results, and in the case of languages that are practically monosyllabic, its dangers are manifestly greater than they would otherwise be.

For example, it is by no means "certain" that the words for "head" (ho, klo, king, and u-k'aung) are "the same word right through." They may, or they may not, be the same, and the business of the scientific student of language is to show either that they must or that they cannot be. That can only be done, alternatively, by establishing the phonetic laws which underlie such alleged correspondences, or by disproving the existence of such laws. If in a considerable number of cases a Shan h-corresponds with a Burmess k'- and a Karen kl-, there may be a basis for the formulation of such a law, provided always that some adequate account is given of apparent exceptions. But no attempt has been made to do anything of the kind. A comparison between Shan and the other Tai languages would have been a more satisfactory, if less ambitious, undertaking, and would have fitted better into the scope of the work. We are a long way yet from these wider syntheses.

Incidentally I would point out that as Palaung has elsewhere been shown to go with the Mon-Khmer family, whose morphological system is quite distinctive and totally different from the Tai and Burmese, any superficial similarity in Palaung is probably due to Shan loanwords and to the general influence of the mainly Shan environment in which the Palaungs live.

The chapters on religion (including myths and superstitions) are extremely interesting and written in a very sympathetic spirit. Mr. Cochrane deals more with the actual than the theoretical religion of the Shans, and while his account is critical it is also appreciative and fair. To the most question whether the Shans formerly followed a Mahayanist type of Buddhism, he contributes no very new or decisive data. A priori it is probable that they did, but definite evidence is lacking. So far as the conclusion depends on the existence in Burmese of Sanskrit technical terms of Buddhism supposed to have been introduced from Chinese by the intermediary of Shan missionaries, it rests on a very shaky foundation. For these words do not show the influence of Chinese phonetics, and it is merely begging the question to assert that they must have come by way of China rather than by a more direct route. As for the non-Aryan words of the same category, who shall say at present whether they are really Chinese loanwords or part of the original common stock, if there was one? In this connection I would also enter a caveat against the use of the term "Northern," for Mahayanist, Buddhism. It is apt to mislead by implication. In India various Buddhist sects existed concurrently in many different parts of the country, and in Indo-China the Cambojans of the far South were formerly Mahayanists.

Mr. Cochrane has a lively sense of humour to which he sometimes gives rather a free rein, but at any rate it saves him from the danger of being dull, and if his occasional quips and colloquialisms shock the sedate student (as perchance they may), the general reader will probably be rather glad of a little comic relief thrown into the midst of a serious dissertation.

A few particular points, not always the author's own, but at any rate cited by him as more or less authoritative, seem to call for individual criticism :- Page xvi (note): The suggested connection of "Tai" with the Cantonese word tai seems to overlook the fact that the former is literally spelt dai. Page 12 (note); Camboja and Champa (not "Chamba" as there) are not identical, and neither has anything to do with "Shan." Page 42 (note): The Nicobarese are not Negritos, and all their dialects (not that of Car only) are related to Mon-Khmer. Page 45 : The derivation of "Khmer" from a Shan expression is most unlikely, seeing that it is the name which the Cambojan people have applied to themselves from very early times. Bid. and page 109: They should therefore be so styled, and not called "Mons of Cambodia," for there were never any Mons in that country, except possibly a few immigrants from Lower Burma or Siam. (I notice that the author calls even the Palaungs "Mons," just as he calls any Tai race "Shans," but I venture to think that such loose extension of ethnical names is to be deprecated; we should not call the Italians "French" for example.) Page 99: "Mon-Aryan" is a misprint (in Forbes's work) for "Non-Aryan," and might well have been corrected. Page 100: There is really no particular point in saying that Shan has "no proper passive voice"; obviously none of the uninflected, non-agglutinative languages can have voice (or for the matter of that mood, tense, number, or person) in their verbs in the way that (say) Latin or Greek has, but that is only a formal matter, for they are quite capable of expressing a passive sense, e.g., Mr. Cochrane himself says that for "I have been beaten" Shan would say "I suffered beating." His comment, that "there is nothing passive in that, except perhaps passive resistance," is amazing. What, after all, does "passive" mean except, in literal terms, "suffering," just as "active" means "doing"? Can anyone conceive a more essentially perfect expression of the passive than this Shan formula? Page 104, seq.; Like other Indo-Chinese alphabets the Siamese alphabet is of the Southern Indian type (though

deliberately modified from it; the distinction Mr. Cochrane here and elsewhere seems to make between "Sanskrit" and "Pâli" alphabets is based on a misconception, for both languages have been written in Indian alphabets of various types (and both often in the same type), the true, but merely negative, distinction between thom being that Pall has no use for some few letters which Sanskrit requires. The early history of the Shan alphabet can only be ascertained (if at all) by detailed palmographical comparisons for which the materials do not appear to be available at present, at any rate in Europe. It would, however, he interesting to know how the MS, referred to on page 108 as "earlier than A.D. 1300" is proved to be an original, for the date strikes one as extremely early for a palm-leaf MS. in Indo-China, where elimatic conditions are by no means favourable to the preservation of that material. Pages 105-6: The references to and quotations from various (and mostly rather obsolete) authorities on Khmer antiquities and their supposed dates seem somewhat uncalled for. These writers contradict one another, and the dates they give are mutually inconsistent and quite hypothetical. Why are not the more recent and reliable French authorities cited, if the subject (which is really not very relevant) was to be introduced at all? Page 136 (note): There are some curious misprints here, your for you, overa for obvia, and Calvanism for Calvinism. Page 178 (note): As to the position of married women in Shan religious literature, it is to be borne in mind that that literature was borrowed wholesale from India, where there was a strictly patriarchal system, in which the position of women was necessarily a subordinate one. It is, however, notorious that the actual status of Burmese women is one of much greater independence, though the Burmese religious literature also came from India; and what we should like to know is not so much what the position of women is in the Shan books, but what it is in real life. Perhaps Volume II will tell us that, and many other things as well.

C. O. BLAGDEN.

Anthropology.

Arboreal Man. By F. Wood Jones. London: Edward Arnold. 1916. 71

Price Sr. 6d.

In using this review the reader is asked to bear in mind that the reviewer is, and has long been, as convinced of the pronograde ancestry of Man us Professor Wood Jones is of his arboreal descent. This admission at the outset will probably prevent misunderstanding.

In the first place, we are greatly indebted to Professor Wood Jones for the masterly way in which he has crystallised the arguments for his point of view, and has focused attention on a subject of which many of us have thought only loosely, if at all.

On reading his book, however, I have been impressed more and more with the opinion that it is the address of a clever counsel for the prosecution, and not the summing up of a just judge. I find no weighing of evidence in favour of a pronograde ancestry, and if I had not had the opportunity of dissecting many of the animals which he has examined, I should have closed the book, in all probability, with the firm conviction that the case was proved and the defendant condemned.

It remains, in all fairness, to hear the counsel for the defence before the verdict is reached, and this defence, I think, would need as much space as that part of the present work which deals with the arboreal ancestry of Man, since much of the book consists of very interesting, though, for the point at issue, irrelevant details.

I cannot, of course, attempt, in the space at a reviewer's disposal, to set out all the arguments for the other side, but I should like to show that there are points,

of which I will not suggest Professor Wood Jones is ignorant, but which, like a good pleader, he has left for someone else to use.

Let us take a point from the skeleton of the force limb. In the pronograde mammals the radius becomes the important bone of the forcarm; its head widens and stretches across the greater part of the lower articular end of the humerus, so that the trochlear surface for the ulna is quite inconsiderable. In orthograde and branhiating mammals, however, the radial head is disc-shaped, and only articulates with the capitellum of the humerus; but when we look at the developing bones of Man we find that the epiphysis for the capitellum still stretches across and forms quite half of the trochlear surface for the ulna. Is not this a persistence in the young condition of a pronograde stage in which the radial surface of the humerus was much larger and more important than it is in the orthograde or brachiating adult?

Then in the joints there is a vestigial fold in Man's shoulder, known as the middle glenohumeral ligament. This corresponds exactly in position with a strong ligament of great use in pronograde mammals for supporting the weight of the body by limiting extension of the shoulder joint. It is of no use in Man, but its remnants are there.

In the muscles Professor Wood Jones has ignored all but one special group, the pronators and supinators of the forearm and the serratus magnus muscle, but he has not recognised that this latter muscle is a special adaptation to the pronograde position, acting on each side as the chains of a suspension bridge, which sling the front part of the trunk on to the pillars of the scapulse as soon as the support of the coracoid bone is removed. This muscle is very small in amphibians and reptiles but extends its attachments from the neck to the hinder ribs in pronograde mammals. It is partly disappearing in Man, it is true, since its use as a sling is no longer needed, but its neck part still persists as a separate muscle—the levator anguli scapules.

In the diagram which is given of the serratus magnus of the horse on p. 135, the neck portion of the muscle is omitted, yet no one who has dissected a horse or any other pronograde mammal could deny that it is there.

Again, the three condylar heads of the flexor profundus mass of the forearm constantly reappear as atavistic variations in Man, and are only to be found in their full development in such generalised pronograde types as Erinaceus and Gymnura among the Insectivora.

These are only a few instances of many which, in my opinion, can alone be explained by regarding Man as continually harking back to a pronograde condition, and no fair discussion of Man's ancestry can afford to pass over in silence the stavistic variations which are so constantly reminding us that his ancestors once used their fore limbs for support rather than for preheusion. I think that Professor Wood Jones's position is diagrammatically put before us on page 55 of his book, where he compares the skeleton of the fore with that of the hind limb. To a lay reader nothing could be plainer than the similarity between the two limbs as they are drawn; but if the patella, with its big extensor muscles, had been contrasted with the electron and its extensor muscles, even the lay reader would have seen that the similarity between the two limbs was far from complete. Professor Wood Jones selves the difficulty by omitting the patella altogether from his diagram.

I do not hint that Professor Wood Jones is ignorant of these facts, and many others like them, or that he could not meet and explain them if he would. I only want, in justice to my side of the argument, to point out that he has not done so, and that he has thereby given the lay reader, for whom, I think, this book is primarily intended, an idea that his contention is almost self-evident.

I should like to see him, or someone with equal powers of exposition, take up the ease for the defence, and then sum up without bias. When that is done the lay reader might play the part of the jury, and I for one would be well content to await his verdict.

F. G. PARSONS.

Archæology. Hubbard.

Neolithic Dew-ponds and Cattle-ways. By Arthur John Hubbard, M.D., and George Hubbard, F.S.A., F.R.I.B.A. Third Edition. Pp. xxi+119. Figs. 29. London: Longmans, Green & Co. 1916.

The breezy style of this book, reminiscent of the Down air, has assured its popularity, and it is no wonder that a third edition has been called for. The authors know their country well, and no detail, however small and unimportant it may appear to the uninitiated, escapes their notice. Every trackway and pond is noted and the meaning of each explained with a fullness and certainty which arouses suspicion in the sceptic. Why everything on the Downs should be relegated to Neolithic days is not quite clear, except that it sounds distant and romantic; it suggests that these wild regions have remained unvisited by man or beast during the period that has elapsed between the close of the Stone Age and the arrival of the authors.

They consider that the period described may be divided into two—the Hill period and the Plain period, though no definite evidence is adduced in support of this classification. Contrary to nearly all the evidence resulting from recent excavations, the Hill-top camps are assigned to the first period, and the authors are uncertain as to nothing but the relative ages of the tumuli and barrows. The distinction between these two forms of mounds is not given, which is a serious omission, as the ordinary archmologist has been wont to look upon these terms as synonymous. Perhaps the authors mean long barrows and round barrows, in which case the contents of those explored might have helped them not a little, and shown them that most, at least, of the latter are post-neolithic in date. The attempt to show that the remains of terrace-cultivation, known as "shepberds' steps," were designed originally as defences against wolves is ingenious if not altogether convincing.

Though the interpretation of the phenomena noted cannot be seriously accepted, the authors may safely be congratulated on their powers of observation and description. The book is eminently interesting and attractive, while the illustrations and the general "get-up" of the volume do credit to authors and publishers alike.

HAROLD PEAKE.

Museums.

Leite de Vasconcellos.

De Campolide a Melrose.' Pelo De J. Leite de Vasconcellos. Lisbon. 1915. 73

This little work is an interesting account by Dr. Leite de Vasconcellos, the distinguished Portuguese ethnologist and scholar, of the results of an expedition through Great Britain and France, in the course of which he visited the principal museums of these countries and other institutious affecting his studies. The British Museum is especially dealt with at considerable length, and with intelligent appreciation. The museums of Oxford (especially the Pitt-Rivers) and of Edinburgh also attracted the attention of this very competent anthropologist. On his voyage southwards be did not delay long over the Paris collections, which he had noticed in a previous work, but gives a valuable appreciation of the Museum of the Society of Antiquaries at Poitiers.

Such studies by friendly observers from abroad are of great value as showing how our national collections, which do not always receive sufficient recognition from our own authorities, are regarded by competent foreign observers.

M. LONGWORTH DAMES.

SOME TYPES OF NATIVE HOES, NAGA HILLS.
(Scale, sue-fourth.)

ORIGINAL ARTICLES.

Archæology. With Plate G. Balfour.

Some Types of Native Hoes, Naga Hills. By H. Balfour, M.A. 71

There are very many points of interest in the processes and observances connected with agriculture among the native tribes of the Naga Hills, Assam, and among the implements used there are several which are noteworthy. In the present note I wish to call attention to certain varieties of the native agricultural hoes which offer features of special interest, and which deserve to be placed on record on account of the primitive characters exhibited by them, and also because a series of developmental stages can clearly be made out. Further, by reason of the increasing facilities afforded for importing more advanced types, the more primitive forms are tending to disappear. For the specimens which I am about to describe, and for information regarding them, I am greatly indebted to Mr. J. H. Hutton, I.C.S., from whose generosity the Pitt Rivers Museum has very considerably benefited.

Among the Sema, a very primitive tribe of Naga, the Lhota, and also some of the Eastern Naga, a very simple and rudimentary form of hoe, called abuse by the Sema, is still in use for eradicating weeds from crops. It consists (Figs. 1 and 2) merely of a narrow, flat strip or band of bamboo, about 18 inches to 22 inches long and about 4 inch wide. This strip is divided roughly into thirds; the central third is shaved down to form a sharp, flexible blade; the terminal thirds are left somewhat thicker and form together the handle. The democration between the thicker and thinner portions is abrupt, as may be seen in the "dorsal" view (Fig. 2). To form the hoe, the two cuds are brought together and crossed, and are then bound together with a cane strip at the point where they cross one another. This causes the flexible central part, or blade, to assume a strongly curved form. The boe, thus formed, has somewhat the appearance of a necktie. The crossed ends form a convenient grip and the pitch of the blade (see side view, Fig. 1a) would appear to be very practical. Such a form of light, scratching hos, efficient though it is for the purpose to which it is deveted, is made very quickly and easily with a few cuts of the dao, and costs nothing. It has its drawbacks, however, since it is necessary to keep the newly-made ones for a year or so before they are fit for use, as they must be allowed to harden. Even when this precaution has been observed, and after they have been further hardened by smoking, these hoes wear out very rapidly, and are often used up at the rate of seven or eight a day per person. Hence it is natural that the primitive bamboo akswa is being supplanted by iron-bladed hoes, and is showing signs of obsolescence.

Many Sema villages are without means of working iron, and import their spearheads, dao-blades, etc., though where they have taken to iron-working they prove to be elever smiths. Men of the Lhota tribe have stated definitely that the bamboo hoes are the prototype of the iron hoes of similar form (I particularly asked Mr. Hutton to ascertain whether this is so), the examples made of iron having come into vogue comparatively recently, within living memory, with the result that the bamboo examples, though formerly commonly in use, have almost disappeared from the Lhota country.

There is evidence that, even though more or less developed iron-bladed hoes have been introduced from more advanced districts, there has also occurred indigenously a direct development from the hamboo akwara. A very significant type of iron weeding-hoe is found in use among the Ao Naga, who call it allu-lum (i.e., "field-scraper"). Though entirely of iron (Figs. 3 and 3a), it is an exact replica of the hamboo "necktie"-shaped hoe. It is made from a single piece of flat iron,

the cautral third wider than the ends and forming the blade, which is strongly arched by the bending of the iron until the two narrow, straight ends cross one another, exactly as in the bamboo form. I am not sure as yet whether the allu-lum is actually used in this form un-hafted, or whether it is invariably fitted to a haft. The examples sent to me are not bound at the point of junction of the crossed tangs (as in the akuwa), and this would be nacessary to render them serviceable for use. The specimens are, however, unused, and have not been quite completed for use. In any case, the shape with the crossing tangs as turned out by the smith, even though it may have, as it were, but an "embryological" significance, points unmistakably to a direct derivation from the bamboo boe, of which it is a mere copy in iron. The deeper blade prolongs the useful life of the implement.

Such forms of two-tanged hoe blades of iron are usually seen fitted to wooden handles, and a very interesting transitional form of hafted hoe is seen in Figs. 4 and 4a. This was procured from the Konyak Naga, of Chinglong village, but the type is also to be seen among the Ao and some of the Lbota who live near the plains and are more in touch with higher cultures. The blade with its two tangs is almost identical with the allu-lum of the Ao (Fig. 3). It is less strongly arched. as the taugs, though converging, are not brought together, but are fitted to a haft of peculiar form. This haft (Fig. 4) consists of two straight and slightly flattened bamboo rods, each of which is cut in the form of a hook at the distal end. tangs of the blade lie along the under side of the rods, their extremities being clipped through holes in the latter, to which they are further secured by collars of plaited cane. The booked ends of the rods help to keep the blade in place and to prevent any tendency to shift when drawn through the ground. A specially interesting feature of the haft is seen in the crossing of the two rods which compose it, a feature which is so markedly reminiscent of the bamboo prototype of "necktie" form. At the point of junction a wooden rivet, the ends of which are burred or "mushroomed" by hammering, unites the rods firmly together. The resultant haft is awkward in appearance, and would hardly have been purposely so designed; its shape is clearly due to "hereditary tendencies," and is derived directly from the conveniently crossed tangs of the simple bamboo hoe.

Another type of weeding-hoe, showing a marked improvement upon the last, though still betraying its derivation from the akuwa type, is shown in Figs. 5 and 5a. It was obtained from the Ao Naga. The two-tanged blade is one of the allu-lum (Fig. 3). The haft is improved from that of the Konyak example (Fig. 4), and is far more convenient. The X has become a Y, and the single stem forms a very serviceable grip. The distal end is cut to form two diverging prongs, to which the tangs of the iron blade are fastened. The latter lie along the under side of the prongs of the forked haft, and are held in place by means of a neatly-executed "whipping" of narrow cane-strip. At the extremity of each prong a reinforcing binding overlies the whipping, and is very eleverly and ornamentally finished off. The edge of the blade of this specimen is considerably wern at the centre as a result of use.

The four types to which I have referred appear very clearly to represent four successive evolutionary stages in hoe development. First, there is the "necktie" hoe, made by crossing the ends of a bamboo splint. Second, an identical form made of iron, which the natives assert is a derivative from the first. Third, the two-tanged blade hafted to two wooden reds, forming prolongations of the tangs, whose ends are crossed and so retain the "necktie" shape of the prototype. Fourth, the same type of blade hafted to a Y-shaped handle cut from a single piece, in which a single grip replaces the awkward X-shaped handle, the result being an eminently serviceable tool.

Other types of iron-bladed hoes are found among the Naga tribes, which appear
to have developed along different lines. They mostly suggest a derivation from stone
celts hafted adze-wise in various typical neolithic fashions. Some small hoes
obtained among the Naga of Ledo were sent to me by Mr. S. E. Peal, in which
the iron blades are flat, and forged with very broad tangs and shoulders. These are
hafted by bending a case rod round the tang so as to grip the latter, the ends of
the rod being bound together with a sliding collar of canework, a mode of hafting
well known in Australia and in North America. This type of iron blade may be
derived from the tanged-and-shouldered type of stone adze (or ? hoe) which is
specially characteristic of the Indo-Chinese area, and which is very abundant in
Burma, the Shan States, Cambodia, Annam, and the Malay States. This type, in
a somewhat undeveloped form, is very common in the Naga Hills.

Other hos-blades of iron, simply tapering upwards from the edge, and reminding

one of almond-shaped neolithic celts, are hafted among the Lhots, Sema, and others by binding on to the front of the shorter limb of an angular handle cut from the junction of two branches, after the fashion of many stonebladed adzes from New Guinea, the Solomon Islands, and elsewhere.

Others, again, are driven into holes near the ends of club-like handles, a very common neolithic mode of hafting in many parts of the world. Among the examples of this type of hafting some are seen in the Naga Hills in which the iron hoe-blade has a well-defined single tang (Figs. 6, 6a, and 7, 7a). The two examples figured seem to show a relationship



West & Central Naga tribes.

with, or the influence of, the bowed blades (e.g., Figs. 3, 4, and 5) described above, and thus may be indirectly linked with the bamboo akuwa, inasmuch as the blades are more or less strongly curved, the concave surface being towards the handle. The specimen shown in Figs. 6 and 6a was procured from the Sema, who had imported the blade from the Yachumi country. It is called tackumi by the Sema, and is used for clearing stubble from old fields. The blade of the hoe shown in Figs. 7 and 7a was procured by the Sema from the neighbouring Yingurr; it is called da-füchi. A similar form comes from the Chang tribe.

I give for purposes of reference a rough sketch-map showing the positions of the various Naga tribes referred to. The map is based upon one kindly sent to me by Mr. Hutton.

HENRY BALFOUR.

Africa, North.

Murray.

Marriage Oeremonial of the Barabra. By G. W. Murray.

The following is an account of the marriage customs of the present inhabitants of Shellal. When a young Nubian wishes to marry a certain girl, he tells his father, who despatches an embassy, as it were, to inform the girl's father of the proposed match. If the match is convenient to both parties, the families meet separately to discuss the details of how the match is to be carried out. A night is fixed, when the marriage contract is drawn out before the gadi. Of the sum for which the bridegroom makes himself liable, half is paid on the spot to the bride's father. The other half is to be paid to the bride in the event of her being divorced by the groom, though if she leaves him of her own accord nothing is paid. Unlike the custom of the fellshin, the bride does not have to provide the household furniture, or even her own jewellery, but instead of this her father provides the house for the newly-wedded couple. The bridegroom has to find not only his own marriage garment, which should be of silk if possible, and as expensive as his means allow, but also the bride's trousseau and, as mentioned above, her jewellery.*

After the contract has been signed, a feast is given at the bridegroom's house, to which all the village is invited except the bride's family. A calf, an ardeb of dura, and half an ardeb of wheat is sent to them for their delectation; on this night the bride makes her toilet and stains her person with henna. On the morning after the feast a collection is taken up among the guests for the bridegroom's benefit, each contributing according to his means. The bridegroom's father makes a note of the amount given by each, so that on the occasion of the contributor's marriage (or, if he is an old man, his son's) it may be given back to him. The manner of giving the money is as follows: The bridegroom lies on his back, while the contributions are placed on his forehead. After this the bridegroom performs his ablutions and dresses himself in his marriage suit. He fastens a handkerchief over his mouth, securing it on the top of his head as if he had the toothache. This to ensure his silones on his journey to the bride's house, even if it lasts all He carries a sword in his right hand, resting on his shoulder, and a knife bound on his left arm within his sleeve, and a kurbash and the sheath of the sword in his left hand. A handkerchief is inserted in the sheath. He proceeds thus to the bride's house, arriving at sunset, when all partake of dinner, the above mentioned calf being killed and eaten. (It does not matter where the calf is killed.) They est a second meal about 9 p.m., and remain talking till midnight.

The bridegroom has to rise and salute with his sword all comers, even the smallest child, and may not sit down again till the visitor has given him leave. At midnight the bridegroom visits the special house which has been built for the bridal pair in the courtyard of the bride's father's bouse. The bride is brought there for his inspection, and taken away again by her mother after about five minutes. All the guests enter, and a third meal is caten inside the house. Then they go to sleep in the house, which is now the bridegroom's. On the second night three married women bring the girl to the groom, and they do not release her till he has given them a shilling or two for her. For three days from the first night the bridegroom does not stir from the room, except to ease himself. After three days he kills a sheep, and takes its head and haunch to his father. The rest goes to furnish another feast for the relations. After forty days the bridal couch is removed; until then it is not touched, nor is any dust that falls upon it removed.

After forty days the handkerchief is removed from the sheath; until then the

^{*} A common present from the bridegroom to the bride is 100 small articles, each worth about one plastre.

sword and the whip have been placed between the mattress and the mats (bursh) on which it lies.

During the period from the first marriage feast to the next new moon thereafter, neither groom nor bride may put their legs into the Nile. All ablution is performed in the house.

Marriages should not take place in the month Muharram. Showwal is the best month. There must be no mending of clothes or fantasia while the "Scorpion" (Ursa Major) is above the borizon.

Child marriage is common; long betrothals are not customary.

G. W. MURRAY.

Mythology. The Spirits of the Dead in the Trobriand Islands. By F. R. 76 Barton.

The extremely interesting paper contributed by Dr. Malinowski under the above title in the Journal of the Royal Anthropological Institute, Vol. XLVI, p. 353, demonstrates very clearly that the natives of the Trobriand Archipelago do not directly attribute the condition of pregnancy to sexual connexion, and the writer gives good grounds for thinking (p. 414) that the same ignorance prevails in some measure among the Western Papuo-Melanesian tribes. It was while reading Dr. Malinowski's paper that I recalled a letter written to me some ten years ago, when I was administering the Government of the Territory of Papua. At that time Mr. R. L. Bellamy was the Government officer in charge of Kiriwina, the largest island in the Trobriand group, and I frequently corresponded with him on questions respecting native art and customs in Kiriwina. His letters I have kept, and on referring to them I find that in 1906 he had actually gathered the elements of the same information which Dr. Malinowski has set forth with so much valuable amplification in Part VII of the paper under notice. The following is a quotation from Mr. Bellamy's letter of June 1st, 1906:—

"Puritari, chief of Mulossida, gave me quite a generous laugh the other day. We were discussing the arrival of the first people on Kiriwina. Puritari says he has seen 100 toitus" seasons, which statement allows room for a judicious compliment on his still youthful appearance. First of all he said there was just bush—no man. A lisard started scratching and out sprang a pig. The pig took up the scratching and rooting and out came five girls. And soon afterwards these girls had children. As we had not yet spoken of men, I put the question to him as to why and how they could have children without men. He thought it quite a silly question. The girls, he went on, lay in the dorsal position on the ground when a heavy shower of rain came on. That settled it. Puritari blamed the rain.

"Now it would seem that in the natives' mind here childbirth is not necessarily, connected with sexual intercourse. It is a subject I haven't touched upon with the natives yet to any extent."

I do not recollect having subsequently had any conversation with Mr. Bellamy on this subject, nor do I know whether he took any further steps to investigate the matter. Early in 1907 I left New Guinea.

It may also be worth recording that in 1903, when I was patrolling the country near the foot of Mount Obree, on the southern aspect of the Owen Stanley Range, my Sinaugolo carriers informed me one night over the camp fire that we were then in the neighbourhood of a village which was inhabited solely by women. I remember asking them jokingly how in such circumstances these women were able to repro-

^{*} A species of yam, see p. 372 of Dr. Malinowski's paper.

[†] of the tradition concerning the cause of pregnancy of Bulutukua on p. 412.

duce, and that they replied that this they were able to do through the agency of pointed stones. I cannot, however, remember whether I asked them how it came about that they bere no male children. They further informed me that many years previously two men of one of the upper Sinangolo villages lost themselves while pig-hunting, and were caught by the women of this village, who treated their two captives so scandalously that one of them succumbed and that the other escaped in a condition of extreme debility by crawling away on his hands and knees. Next day, while we were passing along a high ridge, they solemnly pointed out to me a distant range of hills on which they said the women's village was situated.

On p. 415 Dr. Malinowski states that in conversation with Sinaugolo flatives he received negative answers to all direct questions whether there is anything in sexual intercourse which induces prognancy. Presumably he had not at that time been in Kiriwina, for he states that "unfortunately" he made no inquiry of his informants as to whether there are any Sinaugolo beliefs about the "supernatural cause of pregnancy." Perhaps he regarded the information at that time with much the same kind of thoughtless levity as that in which I listened to the story of the male-less village.

F. R. BARTON.

Botany. Prain.

The Geographical Diffusion of Kava and Betel. By Sir D. Prain,

The use of kava (the infusion of Piper methysticum) according to
Hartwich (Menschl. Genussmittel, pp. 500-503) covers an area extending from
130° E. Long. to 145° W. Long. and from 30° S. Lut. to 16° N. Lut. Mr. Drake
del Castillo says (Fl. Polyn. Franc., p. 165) that it occurs spontaneously and as a
cultivated plant in the Society and the Marquesas Islands. But it has to be kept
in mind that such a plant may be spontaneous without being necessarily native,
and there is no record save that of Drake as to its having been found in a wild
state. Hillebrand (Fl. Hawaii. Isl., p. 417) definitely states that it has not been
observed in a spontaneous condition in the Sandwich Islands, and B. Seeman (Fl. Vil.,
p. 260) also speaks of it as if it were only a cultivated plant in Fiji. In an
interesting note on the plant Seeman says that kava is not known in those islands
which are inhabited by Papuans.

The use of betal is evidently, so far as India is concerned, traceable to a Malayan origin. Sir George Watt (Commerc. Prod. India, p. 891) has ventured to suggest that it is perhaps a native of Java, and Hartwich (Menschl. Genusemittel, p. 531) has mentioned some evidence in favour of that theory. But from what is known of other economic plants, e.g., the Pomelo, which came to India from Java, and is still on this account termed by the people of Bengal the Batavi Limbu, i.e., the "Javan Lemon," this is doubtful. Konigsberger (in a letter to Chibber, quoted in a recent number of the Linnean Society's Journal, Vol. xli, p. 357) denies the claim of Piper Betle to be a wild plant in Java. However, according to Konigsberger, P. Betle is wild in Celebes, and probably also wild in the Moluccas. This is interesting, since Celebes and the Moluccas lie east of the "Wallace Line," and, from the botanical standpoint, all east of the Wallace Line is Papuasia, though it is more usual to consider Celebes and the Moluccas as integral portions of Malasia.

Briefly, the conclusion from the facts available would be that betel (Piper Betle) is of Papuasian origin and that its use has spread westward to Malaya proper, and from Malaya proper to India; while kava (Piper methysticum) is of extra-Papuasian origin, though where outside Papuasia that origin is to be sought is not certain. The chances are Polynesia somewhere—one cannot say more at present.

D. PRAIN.

Ray.

Solomon Islands: Linguistics.

On a So-called Malayta Vocabulary. By Sidney H. Ray.

In the Zeitschrift für Ethnologie (Band VIII, pp. 405-417) a vocabulary was published by H. Strauch in 1876 of a supposed Malayta language. The island of Malayta (or Malaita, properly Mwala) is situated in the south-east of the Solomon Group, but the vocabulary was not collected in situ. Lieutenant Strauch obtained it from two "South Sea Islanders," during the stay of the "Gazelle" at the Quarantine Station at Brisbane, Queensland.

An examination of the words in the vocabulary discloses the fact that it does not belong to any dialect of Mwala (or Malayta), but represents a language of Ysabel Island, which is situated to the north-west of Mwala. This will be apparent from the following list, in which the first column gives the word as in Strauch's list, the second the real Mala (San dialect), and the third Bugoto, the best known language of Ysabel Island :-

BEGLISH.	STRAUCH'S LIST.	SAA.	BUGOTU.	Nower.
Sun	néhō	soto	aho	Sugotu na (article "the").
Moon	white	warowaro, sineli	vula	
Water	mbien	wai	Zen	
Fire	bibaesan	duce	joto	Bug. benbethu (a flame, to blaze).
Ashes	dschölő	qasa-ura	pideravn	Perhaps a misprint for joto. Of. "fire."
Smoke	näht	MER (N.C), (T)	aha ala	Bug, article na.
Sky	nāgūrī	salo, leni	maalos	Bog. na gari (the wind).
Thunder	nōhá	loulou	guon 2/-	Norn.—Strauch has reversed
	- 61		13.71	the woods for "thunder"
Lightning	gūmu	waariri	onn	and "lightning."
Iron	1705 ES	Test	valan-	Perhaps a misprint, Bug, totoka (a hoe).
Wood	ngaro	davo, ni	gsl	de month
Eye	mátá	maa	mata	
Nose	ého	galusu.	fhu	
Mouth.	lèwő	WAWA	livo	
Tooth	kd8s	niho	ket	
Face .	baks	maa	mata	Cf. next word.
Cheek	ngős	papali	ðako	Bug., San, solvoi (chin).
Whiskers	bhlöng	susate	bulunousou	Bug., beard.
Arm	lfmi	nime	Hma	100 - 1
Hand	tfmil	nime	lims	Apparently a misprint of "t"
Finger	lottiletti	riirii	kaukan	
Leg	nM	88	786	
Foot	tatabá	penata-na aena	dithada	Hug, and Saa, sole of the foot.
Head	ala	qau	ulu	
Forebead	Mgnate	dara	Inne	
Hair of the head,	bartia	warehn	scschu	Bug. bunburs (grass), or vu- vuluga (hairy).
Tongue	shpt	mea	thopi	
Nail	hgūghū.	mwini	guugugu	
Breast	rlings	BUST	ragn	
Belly	kúth	apo	kutu	
Bank	pögűrű.	pulo	poguru	
Navel	rospe		sope	
Anus	boles		-	

^{*&}quot;Als S.M.S., Gaselle" wahrend ihres Aufenthalt in Brisbane (Queensland) auf der Quarantine-Station bei der Peel-Insel lag, hielten sich vorübergebend swei. South-Sea Islanders," die wahrscheinlich wogen eines Vergebens von einer Zucker-Piantage gefichen waren, an Bord auf. Soviel in Brisbrung gebracht werden konnte, waren beide von Malayta und erst seit kurzer Zeit in Queensland. Dieselben konnten nur einige Worte english, doch werden die umsiehenden Wörter pantomimisch erlangt," pp. 406-7. [111]

ENGLISH.	SZRAUCH'S LIST.	SAA.	BUGOTU.	Notes.
Buttock	kilk		kes	
Testicles	bord			
Penis	₩55	-	vio	
Fow1	kökürékő	lens	kokorako	
Fish	niae	hoi-ia	řel, iga	
Pig	bo/o	põo	dotho	
Szake	poli	mwas	poli	
Cow	fu	keu (English)	kau (English).	Bug, in dog, Saa usu dog.
Go	taweti	lae-wau	taveti	
Sit	Jopo -	io	вороп	
Stand	/0káca	ure	sokara	
Run	riigë	hura	rage	
Lenp	f Allagnče	pola	sogala	
Lie, lay	dengti	eno	all	
Swim	å65	olo	otho .	
Sea	dodórro	lio, Ioo	regi, dodoro	Bug. dodoro (to watch).
Hear	ronago	1000	TOOTONO	
Sleep	ngôra	maahn	mare	
Dance	ačeigállá ?	maomno	Cf. Loan	
Fool .	kikinimbt	hied, hisseini	d. mad	
Throw	ačniš.	asie	soni	Final & is obj. pron, 3rd sing.
Die	oliondo.	mae	thebe	rame a m del prote, and mag.
Bed	stasi.	nonoma	sisi, mela	
Yellow	målit	sansanla	вловно	mela is "red" in Bugotu.
White	Paris.	reares () ()	para	mens is fee in bugoon.
Black	djongong	rotoheno, palu	iono	
Bont	boro	iola	June - 1 (3)	Gower Is. N.W. Mwala, baru.
Paddle	worth	COMPANY OF THE PARTY OF THE PARTY OF	jama	Last d. Mwala, fote,
Spear	gärrätu	noma	garatu	Land C. M. Walls, 1990.
Dow	bássi	pasí	Jage .	
Arrow	8£05	egio co	eia	
Hatchet	leffelieffa	hau-toutobu	kinkile	
Cloth	pốhê	tooni, sala	pohe '	
Rope	pérti	foli	piru	
Shell (fish)	bốrs		born	There have to a halo and halo
Numerals :-		The state of the s	Wall.	Bug, bora is a hole made by an animal for a dwelling.
1	kāhú	eta, tantas	keha, sikei	
2	rón	e rue	TUA	
8	tớm	a olu	tolin	
4	white	e hai	vatí	
5	lima	e lime	lima	
6	hanoch	e ono	ono	
7	witn	e hin	vitu	
8	halugh	e walti	alu	
9	hia	e siwe	hia	
10	salage	e tasahulu, awala		
11	rike	awala cuana eta	salage sikei	
12	salage rua	awala mana rue	salage rua	
13	salage tolu.	awala wana olu	salage tolu	
20	tutu	e ro awala	tuingu	
80	toln hangawulu	e olu awala	tolu hasavulu	
40	rototo	e had awala	e rua tutugu	
60	lima hangawulu	e lime awala	e lima hasavulu	
60	toln tutu	e one awala	tolu tutugu	
70	wati tutu	e hiu awala		Stemanhin mand
80	hehangawulu	e walu awala	vitu hasavulu vati tutugu	Strauch's word means "80." Strauch's word means "90."
90	hawangain	e siwe awala	hia hanavulu	Hawangatu is a mistake for
100	hawangatu salages	tavalaz	hathauntu	hathamen. Strauch's word is meant for "ninety-ten," but is really
		F 110		"hundred-ten."

Strauch used f for the "soft s" (th of Bugotu), on as English a in "water," δ gutteral. The San and Bugotu words follow the orthography of books in those languages. The letters in italic are nasal: n = ng in "singer," g = ng in "finger," m = nw in "am working," d = nd in "under," b = mb in "amber." Bugotu th as in "this," San q as pw in "upward,"

All the dialects of Mwala are very much alike and show hardly any agreement with Strauch's list. Woate (paddle), bassi (bow), and perhaps acago (lie) are similar to Mwala, and bare (boat) is found in Gower Island, close to N.W. Mwala. On the other hand, all the words of Strauch's list except these four and kikinimbi (feel), are perfectly recognisable as Bugotu, though misinterpreted by Strauch or misprinted in a few cases. The evidence that this vocabulary represents the Bugotu dialect of Ysahel Island, and not a Mwala (or Malaita) dialect, appears to be incontestable.

SIDNEY H. RAY.

REVIEWS.

Siberia.

Shklovsky.

In Far North-East Siberia. By I. W. Shklovsky ("Dioneo"). Translated 79 by L. Edwards and Z. Shklovsky. Macmillan & Co. 1916. Price 8s. 6d.

The name of Mr. Shklovsky—"Dioneo"—is very well known in the literary circles of Russia as that of a writer on Great Britain and her social and political institutions. No other "humanist," translating, as it were, Western to Eastern Europe, has attained his high standard.

This book, however, relates to an early speeh of Mr. Shklovsky's literary career, and is the result of his enforced stay in the Kolyma region of Siberia, where, like so many other political exiles, he did not waste his time.

Like many other ethnographical authorities on Siberia, Mr. Shklovsky was not an ethnologist to start with, but it is easily seen, if only from the knowledge of English literature which he shows in this volume, that his general education was such as to enable him to make valuable ethnographical observations.

The Russian edition of the book appeared in 1895, its contents having previously bean published in a series of articles, for which the author received a medal from the "Society of Friends of Science" in Moscow in 1895.

Until the investigations of the Jesup North Pacific Expedition, which included the Kolyma region, In Far North-East Siberia was practically the only book on this district, and we find frequent references to it in the J.N.P.E. volumes.

It is no exaggeration to say that ethnological students of Eastern Siberia cannot dispense with Mr. Shklovsky's book, though in some respects, as is the case of the numbers of the Chukchse, Koryak, Chuvanzy, &c., the J.N.P.E. volumes give a more correct statement of the facts. For example, on page 5 Mr. Shklovsky says that in 1889 the whole tribe of the Koryak was swept away by small-pox, but Mr. Jochelson, one of the members of the J.N.P.E., still found about 7,000 Koryak some years later.

We cannot agree with the author that it is wrong to put the Lamut and the Tungus into one class (page 184), though we grant him that as far as is known at present the Yukaghir must be placed in a separate group, at least linguistically. Still, we owe our knowledge of this to the profound studies of Mr. Joshelson, which are more recent than Mr. Shklovsky's book.

Mr. Shklovsky gives us a great deal of information about the Kolyma Yakut, the Lamut, and the Chukchee. Among the illustrations there are several plates, with interesting drawings made by the Chukchee. On page 112 there is a reference to "Arctic hysteria," and it is interesting to note that the author does not find these

nervous complaints among people so well acclimatised to the Polar region as the Chukchee.

The translation, including a certain amount of abbreviation, is very successful, and it is not the fault of the translators that they could not find any English ethnographical gazetteer in which to verify the spelling of the names of tribes and rivers. It is to be regretted, however, that they did not refer to such standard works as the J.N.P.E. volumes. They would then have avoided such clumsy forms as Oulooss (instead of Ulus, page 192), Chooktcha, Chooktchan, Yakoots (page 28), Yakutian (page 39), &c. It seems almost better to transliterate Russian names than to make a free translation, and in the case of little known tribes, it would perhaps be better to employ the substantive form for the adjective also. Still more important is the spelling of foreign names of explorers, which should be given in their original form, and not transliterated from Russian. For instance, we flud Kastron instead of Castrón (page 107), Midendorf instead of Middendorff (page 93), Vrangel instead of Wrangell (page 4), Meidel instead of Maydell (page 109), &c.

Some of the illustrations are taken from The Voyage of the Veya (Macmillan, 1881), e.g., page 105 from Vel. II, page 107 from Vel. II, page 101, &c. It is a pity these are not acknowledged in the English edition, even though acknowledgment may not have been required in the Russian edition of the book.

These are, of course, only minor details. Mr. Shklovsky's book may be welcomed as an important addition to the otheographical literature of Siberia, of which there is so little in English.

M. A. C.

Africa, West: Linguistics.

Thomas.

Specimens of Languages from Sierra Leone. By Northcote W. Thomas, M.A., F.R.A.L., &c., Government Anthropologist. London: Harrison and Sons. 1916.

This volume contains a number of vocabularies in various languages spoken in the Sierra Leone Protectorate, and adds considerably to our knowledge of the linguistics of that part of Africa. One language, Krim, appears for the first time, and some phrases and scutences are given in others of which the only published specimens are short vocabularies of ancient date.

The languages belong to several groups, of which the Timne, Susu, and Mende, Gora and Ful may be regarded as the most distinctive of the Sierra Leone region. In the supplement Mr. Thomas gives, also, some specimens of Kru languages which belong to Liberia rather than to Sierra Leone.

The Timne, a grammar and dictionary of which are given in the author's Report on Sierra Leone, and the Limba, which is here illustrated by vocabulary in five, and by phrases in two dialects, belong to that section of West African tongues which resembles the Bantu in (1) the classification of nouns by prefix, (2) the indication of number by a change of prefix, (3) an alliterative agreement of the prefixes of related noun and adjective, and (4) a concord of the objective pronoun with the prefix of the noun for which it stands. Examples from Timne are:

- (1) ra-sek, tooth; ko-ta, hand; a-set, house.
- (2) Plurals: e-sek, teeth; to-ta, hands; e-set, houses.
- (3) Ra-mes r-in, egg one; ta-teh ta-ren, feet two: e-lop s-les, fish bad.
- (4) Sek ra-biha ake, tie board that; sale ri, untie it.

The syntax, however, is unlike Bantu, and though some resemblances have been found in roots there is no certain evidence of connection.

Vocabularies and phrases are given by Mr. Thomas in Belom, Krim, and Kisi, languages of the same group as the Timne, in which—Kisi especially—the use of the prefixes to indicate the plural seems to be giving way to suffixes, possibly owing to

the proximity of suffix-using languages. In Limba, for example, the plurals of names of animals are formed by suffixes, thus: Fo-ya (eye), ta-ya (eyes), yo-nko (hand), te-nko (hands), fe-li (egg), te-li (eggs); but kosa (pig), kosen (pigs), batutu (serpent), batutu-in (serpents), bec-in (birds), fe (fish), fe-ni (fishes) (the last three examples not from Mr. Thomas's lists).

A vocabulary is given of the Susu spoken just within the north-western boundary of Sierra Leone. This is generally recognised as belonging to the Mande group of suffix-using languages, and to that division of them which Delafosee has called the Mande-fu languages (from fu, the word for "ten"). Mr. Thomas also gives vocabularies of Koranko, Yalunka, Kono, and Vai which belong to the Mande-tan division of Delafosse (tan = 10). In these languages the plural is formed by a suffix, by a change in the noun ending, or by a separate word following. To the Mande group of languages also belongs the Mende, of which Mr. Thomas gives vocabularies in the dialects of Ba and Pujehun. There is also a list in Loko.

The vocabularies, as the compiler himself points out, contain some errors, which are marked by a note of interrogation. In Susu, e.g., ib'chanji for "his slave" is properly "thy own slave," and wichusi (bow) is really "arrow." On the other hand, a few words marked (?) are really correct, as, e.g., aito (he sees you), awanto (he sees us). Some of the vocabularies were obtained by the help of Mendi-speaking interpreters, others with the help of Timne. The Gola vocabulary, in which some additional words are given from Koelle's manuscripts, is the fullest account yet given of a language whose affinities have not yet been clearly made out. With it is given a vocabulary of the Ful spoken by scattered communities in the Protectorate Some words from Koelle's manuscripts in Kisi, Gola, Dewoi, Basa, and 'Pwesi, a few texts in Bulem, Limba, Susu, Kono and Loko, and some notes on Tones conclude the volume.

Taken as a whole the book is an important and valuable contribution to the study of the Sierra Leone languages.

SIDNEY H. RAY.

Sociology. Nasmyth.

Social Progress and the Darwinian Theory: a Study of Force as a Factor in Human Relations. By George Nasmyth, Ph.D. With an Introduction by Norman Angell. New York and London: G. P. Putnam's Sons. 1916 Price 7s. 6d. net.

This is essentially a book against war, by one who disbelieves in it, though no effort is made to prove that it is impossible. A biological tinge is given to the work by the author's attempt to show that a "pseudo-scientific social Darwinism"—constituting a distortion of the theory of Natural Selection—is largely responsible for a doctrine of force which leads to episodes of "collective homicide." The present war naturally plays a part in the argument, and Dr. Nasmyth carries his impartiality so far that one is disposed to doubt his fitness for holding the scales. His historical sense is consistently subservient to his idealism, and in his eyes all Europe is tarred with the same brush, the smaller neutral nations alone excepted.

Most thinking men will give conditional assent to the author's proposition as to the futility of war, and it can scarcely be doubted that such international conflicts, will become more and more infrequent. Even the Great War would undoubtedly, in spite of the development of man-destroying appliances, have been conducted with more chivalry and humanity than any former war, had it not been for the infected mentality of a nation rabid with the virus of a philosophy of force such as even Dr. Nasmyth does not seem to have realised, and which he has certainly not traced to its origin. It is no repreach to the idealists that their aims will not be achieved through idealism, but their impatience with facts must necessarily be weighed against them. Mankind is in its infancy, and will progress, as it has already risen, by the method of trial and error. A war may be both, but is not necessarily either. H. S. H.

Mythology. Westervelt.

Haussian Legends of Volcanoes (Mythology). Collected and Translated from the Hawaiian by W. D. Westervelt. Boston, Mass.: Ellis Press. London: Constable & Co. 1916. 6s. net.

The third of $M\tau$. Westervelt's volumes dealing with the mythology of the Hawaiian islands is devoted to legends of volcanous. It is prefaced by $M\tau$. T. A. Jaggar, jun., of the observatory at the crater of Kilaues, the most famous if not actually the largest of the volcanous of the islands, and comprises an interesting epilogue of articles by the author on the geological facts, including an account of the foundation of the observatory.

The legends deal chiefly with the adventures and doings of Pele, the awful goddess of Kilauca. They are well told; but here, as in the previous volumes, we are haunted by the query. How much of the legends is genuine unadulterated native lore, and how much they owe to Mr. Westervelt. They are hardly in a form that can be used with confidence by the anthropologist. No account is given of the manner of their collection; no attempt is made to assign them to any native story-tellers, or to any special districts; no evidence is given of the extent of their distribution, or of the amount of credit now or formerly attached to them. And it is to be doubted, in the absence of evidence, how far, in the face of the prevalence of Christianity and foreign culture for three generations, and of the American settlement of the islands, these stories can have survived unadulterated in the minds of the Polynesian natives. The book, in short, like its predecessors, is one for "the general reader." It is beautifully illustrated from photographs.

E. SIDNEY HARTLAND.

Architecture.

Innocent.

The Development of British Building Construction. By C. F. Innocent, A.R.I.B.A. 284 pp. many Illustrations. Cambridge University Press. 1916.

Evidence of much patient study and research is shown in this book. The author, finding "that there was hardly any information readily available as to "the design and construction of the smaller secular buildings" of past ages in this, country, set himself to study those still remaining in the neighbourhood of his home in South Yorkshire. Many of these buildings have been demolished in recent years, but the act of demolision has enabled the author to dissect the hidden construction of their various parts with more thoroughness than would have been possible if they had not been disturbed.

This book, however, is not purely total in its aim or subject matter, nor have the whole of the examples mentioned in it been destroyed. Old building methods and materials have been studied in various parts of the country, either by personal inspection, from old accounts, books of agriculture and general topography, or from the more specialised works dealing with the smaller buildings of a particular area.

After an introductory chapter, in which the sources of information bearing upon the subject are described, the author passes to the consideration of primitive forms of building, such as the circular or slightly oblong huts with rounded ends, formed of poles and covered with sods or heath. Comparisons are drawn between these early huts and others of similar date and design found upon the Continent of Europe. Modern examples of the type are mentioned—these are the temporary huts erected

by charcoal burners. The author then deals with the class of buildings in which "crucks" form the principal feature of the construction. The analysis of the various types is very complete, and leads to the consideration of more fully-developed timber buildings, with their details, and the work of the carpenter who was responsible for their erection. Walls, floors, slated roofs, thatching, doors, windows, and chimneys, each furnish materials for chapters full of interesting information. The details connected with the work of the thatcher and of the simple tools used by him are especially valuable. This "decaying industry" seems likely to pass into the realms of forgotten things. The author's notes, founded in part upon information given to him by men engaged in the trade, are therefore of exceptional interest.

In Chapter IV the author refers to the "decrease in culture, northward and "westward, which is found in these islands." Not only, he states, is this inferiority found in the buildings, but "it holds good for articles of culture which have no "connection with building. Such are the hand-queens for grinding corn,—Planets "which are at a greater distance from the sun receive less light than those which "are nearer to it, and through long ages, until modern times, the Continent of "Europe played the part of the sun for the culture of these islands." This statement savours of the self-depreciation which is so characteristic of our nation. "Can "any good thing come out of Nasareth?" is a sentiment which finds too many supporters at the present day. Not all our "culture" came from abroad, as the history of our mediaval architecture shows, pay, at times our forefathers were even in advance of continental peoples in this branch of art, and were in a position to repay some of the debts which their predecessors might have incurred.

If hand-querns were in general use in the southern and eastern parts of this kingdom so recently as stated by the author, it must have been due to a revival of their use, for querns fell into bad odour in these districts in feudal times. In those days the lord of the manor, finding the great advantage which accrued to himself from the requirement that all his tenants should grind their corn at his mill, took stern measures to repress all other methods. So, too, with regard to the buildings erected in the northern and western parts of the country. It is not unreasonable to suggest that their archaic type is due to the innate conservatism of the inhabitants of those areas, many of whom were descended from the earlier races which peopled these islands, races which had been driven out of the southern and eastern areas by later invaders. The evidence of early civilisation in parts of Ireland and Scotland cannot be treated lightly, and the fact that men from these islands attained to high positions in continental countries in early days suggests that their home standard of "culture." was not so low as the author of this book appears to infer. These suggestions seem worthy of consideration, and are possibly quite as tenable as the theory that the improvements in the construction of the ancient buildings of this country, and in the articles in daily use, are due to the influence of immigrant Flemings.

The book is issued from the Cambridge University Press; it is admirably printed in clear and readable type, and is well illustrated by reproductions from photographs and line drawings. The author, while fully alive to the beauties of the buildings of the past, quite realises that the present is an age of progress, and one in which new methods and materials are the order of the day. He has no desire to set back the clock, and in his concluding words puts clearly the true relation of the present to the past: "The value of old buildings as works of art does not lie so much in "their suitability for reproduction as in their power for inspiration, in the intangible principles which were given expression in the different materials and workmanship, "whose story in England has been partly told in this book."

JAMES R. WIGFULL.

India: Archæology.

Foucher.

Archaeological Survey of India: Notes on the Ancient Geography of Gandhara. By A. Foucher. Translated by H. Hargveaves. Calcutta. 1915.

The Archeological Survey of India has done well in bringing out this Euglish translation of M. Foucher's excellent paper on the geography of Gandhara, which originally appeared in the Bulletin of the French School of the Far East in 1901. The original was not easily accessible to many of those interested in Indian archeology and history, and Mr. Hargreaves's clear and idiomatic translation will be M. LONGWORTH DAMES. of much use.

Russia: Folklore.

Magnus.

Russian Folk-Tales (translated from the Russian), with introduction and By Leonard A. Magnus, LL.B. London: Kegan Paul, Trench, Trübner & Co., Ltd. 1915.

The Tale of the Armament of Igor, A.D. 1185. A Russian Historical Epic. Edited and translated by Leonard A. Magnus, LL.B., with revised Russian type. translation, notes, introduction, and glossary. Oxford University Press. 1915.

Mr. Magnus, in the former of these two volumes, has translated a selection of folk-tales from the great collections of Afanášev. Russian folk-tales have hitherto been little studied in the west of Europe. Indeed, I think only those translated by the late W. R. S. Ralston and by Mr. R. Nisbet Bain have been accessible, save to the very few who were acquainted with the Russian language. judging by the specimens given here, and by Ralston and Bain, they are not inferior in interest to those in other European languages. Of the seventy-three tales comprised in the present volume, twenty-two (or less than one-third) had been translated or summarised by Ralston, and two or three others by Bain. It will thus be seen that Mr. Magnus's work is a welcome assistance to students of folk-tales.

The stories in general belong to the common Indo-European stock. course they have a special Slavonic flavour-they are filled with horoes and ogree peculiar to Russia, and are tinged with the social condition and history of the Russian peasant. Mr. Magnue's notes are useful. A rough plan of the izho, or dwellinghouse, would have elucidated his description of it in the note to the tale of The Dream. Some additions might have been made to render complete his preliminary instructions for pronunciation of the Russian words.

The tale of The Armament of Igor hardly deserves the title of Epic. It is an historical poem, comparable to a certain extent with the English ballad of Chevy Chase. Mr. Magnus's translation (the first in English) has also the original text face to face, so that the edition may serve as a handbook for students of the Russian language and literature. It is preceded by a long historical introduction on the interminable jealousies and savage internecine wars of the dominant houses of medieval Russia, and is followed by notes chiefly philological. The pagan survivals in the poem are pointed out. The Russian characters used in the scheme of transliteration are thick and blurred, so that it is difficult for one who is unaccustomed to them to identify them with the much clearer type used in the body of the work.

It is likely that Slavonic, and especially Russian, anthropology, philology, history, and literature will in the future play a more prominent part in our studies than hitherto. Mr. Magnus has, therefore, done well to take time by the forelock. Russia would abandon her antiquated alphabet and adopt the Roman alphabet, retaining only special characters for sounds peculiar to her language, what an impulse would be given to Russian studies in Western Europe!

E. SIDNEY HARTLAND.

Russia. Tallgren.

Collection Zaoussallov au Musée Historique de Finlande à Helsingfors.

1: Catalogue raisonné de la Collection de l'âge du Bronze. A. M. Tallgren.

4to. 45 pp. 16 Plates. Helsingfors. 1916. Price 20 francs.

The collection partly catalogued here belonged to a merchant of Kazan, who had risen to great wealth by his energy, and devoted much to the collecting of tools and weapons around his region. Owing to business troubles his property was sold up, and fortunately this great collection of nearly 11,000 objects is now safe at Helsingfors. It comprises 5,282 stone weapons, 1,292 of copper and bronze, here entalogued, 1,417 of iron, 1,010 of bone, 1,637 objects of pottery and glass, and 295 later objects. We may hope that the other sections will be published as well as the bronzes.

The value of the work lies largely in the ten pages of discussion of the relation of East Russian style to Siberia and the West. It was formerly supposed that there was a break after the stone age, and that the bronze work had come in later from Siberia. The interval is now filled, and the bronze age is autochthonous in East Russia. The general style of East Russia is European, developing from the neolithic, while the style of Siberia is Asiatic.

The best defined copper age group is that of Fatianovo, around Moscow, and as far as the Vistula. It is of a clumsy style, neither Scandian nor Asiatic, and is the source of the bronze age style. In East Russia the early bronze is like that of Serbia and Carniola; the middle bronze, 1500-1000 B.C., is more European; the late bronze is the richest, and was in touch with the Mediterranean, as the Cypriot hoe is found, and a pattern on a disc from Ananino seems copied from a favourite design under Rameses III, 1200 B.C.

The socketed axe, or hammer axe, of bronse, is unknown in Scacia and North Russia, but abundant in Danubia, Euxine, Turkestan, and, we may add, Italy and Sicily. It is thus a southern form. In the cemetery of Koban it is dated not before 1500 to 1300 p.c.

The plain blade axe is not separated from the adze in the catalogue, and no side views are given, so that they cannot be distinguished. It is a very common form; but with side lugs only two are known, from Kerteh and Kazan.

Daggers are very common, merging into spear and lance heads. They are divided here into (a) pointed ovals with slight tang; (b) with secondary widening at the head of the tang to prevent being driven into the handle; (c) with full parallel-sided tang. A further division should be made in (a) between the stone forms without a narrowed tang, and the narrow tang, which can only be made in metal. The most remarkable type is a fragment with parallel ribbing along the axis, a design only known in Egypt. As it is of red copper it might go back to a copy of the Egyptian copper daggers.

The tanged spear-heads are of the middle bronze age hammered work, or a copy of such. The socketed spear-heads mostly have open loop blades like the British; they are of late bronze age. They are are very rare in Siberia, and these go with iron knives and triangular Scythian arrowheads. A photograph is given of a magnificent set of weapons in nephrite and silver from Bessarabia.

The axe commonly called a "socketed celt" is very common, and belongs to the latest bronze age. The hoe reached Russia in the bronze age, probably from Cyprus. It is called an "open-socket chisel" here. The faucilies are for cutting grass and brushwood, rather than corn sickles. The knife is curiously localised. While 5,000 are known from Minussinsk (91° E.), only twelve come from E. Russia, and those mostly from Ural (60° E.). This marks an essential difference of culture, and, strengtheoed by the general styles already mentioned, it shows that the Ural is a real parting of civilisations, and that Russia was more European than Asiatic. Indexes of places in text and plates are given, and the plates contain 151 figures, nearly all two-third scale, forming an ample record for students. Let us hope we may soon see the rest of the collection similarly published, without wasteful magnificence, but of full value for science.

W. M. FLINDERS PETRIE.

ANTHROPOLOGICAL NOTE.

Accessions to the Library of the Royal Anthropological Institute.

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(Donor indicated in parentheses.)

Théorie de la Contre-Evolution ou Dégénérescence par l'Hérédité Pathologique. Par le Dr. René Larger. 405 pp. Librairie Félix Alexa. 7 fr. (The Publishers.)

A Comparative Vocabulary of Sikololo-Silui-Simbunda, By D. E. C. Stirke and A. W. Thomas, 7½×4¾, 40 pp. John Bale, Sous, and Danielsson, Ltd. 1916. (The Authors.)

The American Indians, North of Mexico. By W. H. Miner. 74 × 5. 160 pp., Cambridge University Press. 3s. net. (The Publishers.)

South-Indian Images of Gods and Goddesses. By H. Krishna-Sastri, B.A., Rao Sabeb. 9\(\frac{3}{4}\times 6\(\frac{1}{4}\). 272 pp. 4 Plates, 162 Hiustrations. Madrus Government Press. 1916. 8s. 3d. (The Superintendent, Government Press.)

Rings for the Finger from the Earliest Known Times to the Present, with Full Descriptions of the Origin, Early Making, Materials, the Archwology, History, etc. By George Frederick Kunz, Ph.D. Sc.D.A.M. 9 × 64. 366 pp. 290 Illustrations in colour—double-tone and line. J. B. Lippincott Co. 1917. 28s. net. (The Publishers.)

Southern India, Its History, People, Commerce, and Industrial Resources.

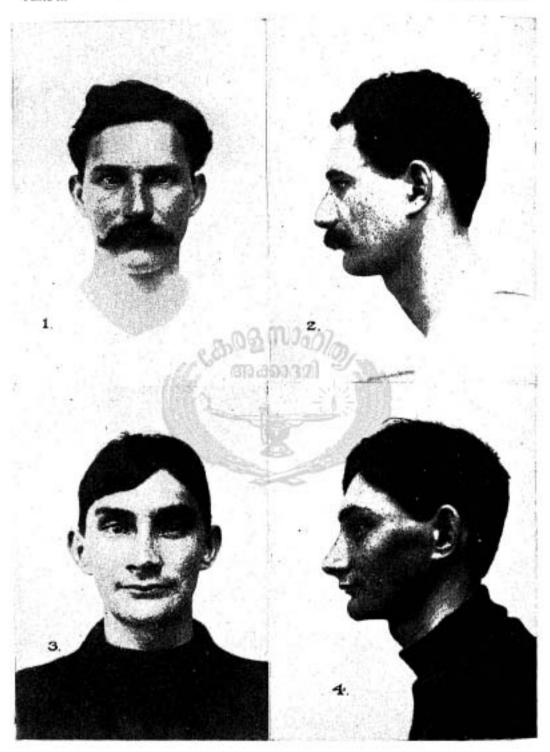
Compiled by Somerset Playne, F.R.G.S., assisted by J. W. Bond. Edited by Arnold Wright. 12\frac{1}{4} \times 9\frac{5}{4}. 756 pp. Many Illustrations. The Foreign and Colonial Compiling and Publishing Co. (Superintendent Government Press, Madras.)

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The Folk-Element in Hindu Culture: A Contribution to Socio-Religious Studies in Hindu Folk-Institutions. By Benoy Kuma Sarkar, M.A., assisted by H. K. Rakshit, B.A. 9\(\frac{3}{4}\times 5\(\frac{3}{4}\). 262 pp. Longmans & Co. 1917. 15s. net. (The Publishers.)

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TWO PITCAIRN ISLANDERS.

I, 2-FULL PACE AND PROFILE PROTOGRAPHS OF CHARLES YOUNG.

3: 4" " " EDWIN YOUNG.

ORIGINAL ARTICLES.

Pitcairn Island.

With Plate H.

Keith.

The Physical Characteristics of Two Pitcairn Islanders.

Arthur Keith, M.D., F.R.S.

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When Mr. and Mrs. Routledge finished their investigations on Easter Island in the antumn of 1915, they touched at Pitcairn Island on their homeward voyage, and there engaged two brothers, direct descendants of the "Bounty" Mutineers—Charles Young, aged 28, and Edwin Young, aged 25—to serve as hands on board their yacht "Mana." On reaching England in the summer of 1916, Mr. Routledge was good enough to send these two men to the Royal College of Surgeons, with the request that I should make for him a survey of their physical characteristics. The two men arrived on a sweltering summer day, and gave Dr. W. Colin Mackenzie and myself the most patient and intelligent co-operation as we made the observations recorded in this paper. So far as I can learn this is the first occasion on which a strict survey of the physical characteristics of Pitcairn Islanders has been made.

In 1790, as a result of a mutiny on H.M.S. "Bounty," there landed in the small isolated and uninhabited island of Pitcairn nine men of British origin, twelve women and six men from Tahiti, 1,300 miles distant. Intersectine strife soon led to the death of the Tahitian men, and by about 1800 only one white man survived, John Adams," who guarded the generation which sprang from the union of the mutineers with the Tahitian women until his death in 1829. Only five of the mutineers concern us in this report—Fletcher Christian, the leader; Edward Young, midshipman; Mills, Quintal, and McCoy (or McKay), members of the crew of the "Bounty."

We have no record of the physical characteristics of these men, but we may safely presume they represented a sample of the 18th century English. Had measurements been taken of their heads and bodies we may presume that these measurements would have approached the means of our modern standards. A maximum cranial length of about 186-190 mm., a maximum width of 141-143 mm., an auricular height of 114-116 mm., a facial width (bizygomatic) of 126-130 mm., a total facial length (naso-mental) of 115-120 mm., a stature of 1,700-1,730 mm. (5 feet 7-8 inches), and with hair, skin, and eyes showing the slighter degree of nigrescence possessed by the English.

As to the characteristics of the Tabitisms who accompanied the mutineers, I had at my disposal the skeleton of one Tera Poo, a native of Tahiti, who died in the London Hospital in 1816, and therefore belonged to nearly the same generation as the Pitcairn settlers. This man fortueately possessed the prevailing cranial and bodily characteristics of the natives of Tabiti. The skull, as may be seen from Fig. 1. exhibits a peculiar kind of brachycephaty—a type which occurs in the Marquesas, Hawaii, and also among Indian tribes both of North and South America. These Tahitian men have skulls quite different in form from any English types; they are short, 174-180 mm.; they are also narrow, 136-142 mm.; they are high vaulted, having an auricular height relatively much greater than in English skulls. Their laws are more prognathous, their faces rather wider and shorter. Their noses are much wider, and a marked feature is the shallowness of their upper jaw, as measured from the floor of the nose to the alveolar border at the incisor roots. As to their colour, Captain Cook, in his first voyage, describes the Tahitians as having "a fine clear olive, or what we call brunette complexion." Their hair is straight, stiff, and black, or wery deep brown. There was thus launched on the Island of

^{*} See Shell of the " Bounty," by Rosalind Amelia Young, 3rd ed.

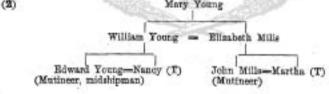
Pitcaira, in the year 1790, a very remarkable experiment, where members of two human races, contrasted in many points of structure, were isolated, and inter-bred.

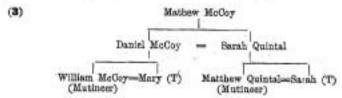
What is more wonderful is that we are able to trace the exact parentage of Charles and Edwin Young. After I had finished the notes which are here published, and had reached the conclusion that Tahitian had predominated over British physical characteristics—a result I did not expect, because of the great number of ships which began to call at Pitcsirn in the middle of the 19th century — Mrs. Routledge obtained from Miss Beatrice Young, of Pitcsirn Island, the accompanying genealogical record* of the two Youngs. I have had to dismember her table in order to fit it to the pages of this journal:—

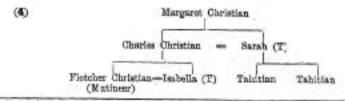
ANCESTRY OF CHARLES AND EDWIN YOUNG.

Maternal Ancestry. **Mother—Alice H. Christian **Maternal grandparests—Alphonso Christian—Surah McCoy **Maternal greatgrandparents** Thursday October Christian—Mary Young Mathew McCoy—Margaret Christian grandparents**

Ancestry of Maternal Great Grandparents. (1) Thursday October Christian—Sussian (T) Friday Thursday October Christian—Sussian (T) Fletcher Christian—Leabeila (T) Tahitian Tahitian (Mutineer) (2) Mary Young







^{*&}quot;This one (i.s., genealogical table) now is all right. I got it out with the help of some of the oldest members of this island, and after working it out on a rough paper I read it to different ones to see that it was all right."—Letter, dated 10(12|16, Miss Beatrice Young to Mrs. Routledge.

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From the above table it will be seen that the subjects of this report belong to the sixth generation of the descendants of the "Bounty"—six generations in 127 years. If we suppose that each parent on the average hands on his or her characteristics to their progeny in an equal degree, we find that the succestral composition of Charles and Edwin Young should be the following:—

13 parts are British, 12 parts are Tahitian.

The British component is made up as follows :-

Young, & Christian, & McCoy, & Quintal, & Mills.

Before proceeding to give an account of the examination carried out by Dr. Mackenzie and myself it is necessary to give some information bearing on the history and condition of the Pitcairn Islanders which I owe mainly to Sir Everard im Thurn and to Mr. Henry Lambert, of the Colonial Office. In 1831, when the Islanders numbered eighty-seven, they were induced to move to Tahiti, but in 1833 they returned to Pitcairn. In 1856 they were again induced to move—to Norfolk Island—but from 1859-64 a number of the original Islanders again returned, mostly Youngs, McCoys, and Christians, and these form the basis of the present population, numbering 163 in 1916. In 1905 there were seventy-seven males to ninety-two females.* Towards the close of last century, when Mr. Joseph Chamberlain was Colonial Secretary, the Pitcairn Islanders were visited, and reported on, by various commanders of H.M. Navy and British Commissioners. All agree that the Pitcairn men "are strong " and active; the women the same, and both are well developed" (Captain H. H.

These facts are chiefly drawn from Beports and edgrespendence relating to the condition of the Pitcairn Islanders issued by the Colonial Office, 1899-1906.

Dyke, H.M.S. "Comus," 1897). Rear-Admiral H. Bury Palliser reported that "there was degeneration from inter-marriage," but it is clear that this statement referred to mental rather than to physical characteristics. "An American missionary " assured ma," wrote Captain Dyke, "that the want of intellect among the young " was simply appalling." "They are not an ingenious people," reported Captain Doughty (1897); "the children speak a jargon at school which is hard to understand." Mr. Commissioner Hamilton Hunter reports that "they are weak in intellect." The Commander of H.M.S. "Royalist" reports (1898), "They look healthy and vigorous, " but the same cannot be claimed for them mentally." He also reports that they "have adopted a patois employed in conversation amongst themselves, although most " adults can speak English very well." He adds further, "there are persons of ability " but a few appear to be lacking in intelligence." The Commander of H.M.S. "Wild Swan" reported in 1901 that there was a "tendency to make use of a " language of their own." Another condition is also frequently noted—an early loss of the upper incisor teeth: "There is a noticeable loss of front teeth," writes Captain Dyke (1897), and adds: "To be correct, the teeth are not lost but broken off." Commissioner Hunter remarks that the women are "disfigured by the loss of " front teeth, seen even in the young." "The front teeth of most of them are bad," says the Commander of the "Royalist." The Commander of the "Icarus" noted " the early loss of the front teeth in the upper jaw "-but some had perfect sets of teeth.

We note that there is a consensus of opinion among those who have visited the island in an official capacity that (1) the Islanders have healthy, active, well-formed bodies and are capable seamen; (2) that there is—in a proportion at least—a lack of mental ability; (3) there is a tendency to the formation of a peculiar form—a native—speech; (4) there is a curious tendency to lose the upper front teeth.

Charles and Edwin Young are robust, active, well-formed men of medium stature.' Mr. and Mrs. Routledge formed a high opinion of their seamanship; they found them capable, trustworthy, and lutelligent. They spoke English quietly, deliberately, and exactly, and yet it seemed to me they spoke it as if it were to them an acquired tongue. They had a certain timbre in their voices which struck me as neither British nor European. Speaking of the Tahitians of 1769, Captain Cook said: "Their motions are easy and graceful, but not vigorous; their deport-" ment is generous and open, and their behaviour is affable and generous." That description is wholly and truly applicable to the two Youngs. They had an air of easy composure under all circumstances-characteristics which seem to me to be Tabitian rather than European. I was struck with their negative rather than positive mental qualities, and formed the opinion that their powers of apprehension were limited. They also illustrated the statements made as regards loss of upper incisor teeth. Charles, although only twenty-eight, retained only nine of his thirty-two permanent teeth. In the upper jaw he had both canines and three of his molars; in the lower jaw two incisors, one canine, and one molar. In the younger brother, Edwin, ten teeth were retained-two in the upper jaw (both of them molars), eight in the lower jaw (four incisors, two canines, one premolar, and one molar). It was difficult to ascertain how and why they had lost their teeth, but on returning to the "Mana" Charles informed Mrs. Routledge that about ten years ago his teeth "began to go bad"; "they were good and sound, but caused pain, and so had them pulled out." He maintained that "most people on the island had good teeth and used tooth brushes. They also had two dozen pairs of tooth forceps." Edwin said that in 1910 he pulled out six teeth "because they began to pain." All six, he said, were quite sound. In 1913 he pulled out six more because they gave pain. The latter six had, he said, "become rotten." Mr. Christian, the magistrate, did all the extractions on the island. Mrs. Routledge is certain that any reluctance they manifested to explain the loss of their teeth was due to certain negotiations they had opened up with a dentist at Southampton. The early loss of sound teeth suggests that the operation may have an ethical as well as a medical explanation.

If I had ensually met the Youngs in the street and known nothing of their history, I should have set them down, from a survey of their features and complexion, as natives of the Levant, or perhaps crosses between a European and a native of India. Their cranial and facial characters are well portrayed in Plate H.

With this rather lengthy introduction; I shall now proceed to compare their physical characteristics with British and Tahitian types. Tables of measurements by Dr. Mackenzie and myself are appended to this article. As the complexion of the skin of the Piteairn Islanders agrees with that given by Captain Cook of the Tahitians, and differs from any tint which occurs in England, I infer that the Islanders have inherited entirely the maternal degree of nigrescence.

I, unconsciously, repeated in my notes on the Youngs almost the same terms as were used by Captain Cook to describe the Tabitian skin, "delicately smooth and agreeably soft." When their eyes are examined carefully it is seen that the iris surrounding the pupil is laden with a brown, almost a chestnut, pigment; the circumference of the iris is also pigmented, but between the pupillary ring of brown and the pigmented circumference the iris is of a clear green, the green zone being less extensive in the elder than in the younger brother. The white of the eye is slightly grey, but shows no collections of pigment such as are seen in negroid races. It is when one runs the fingers through their hair that a Tahitian rather than a European feature is noted. The hair of the elder is black, stiff, and stubbly, almost Mongolian in texture. In the younger the hair has a brownish tinge; he declares that at one time it was almost red, and is softer than that of his elder brother. In both of them the hair on the temples, which has been allowed to grow somewhat longer than on the back and crown of the head, was inclined to wave at the points, but in no manner could it be described as frizzy; where it was short it was straight and stiff. They had abundant black hair in their armpits and on their pubes; scattered hairs also occurred on the chest and abdomen, the elder brother being the more hairy of the two in this respect. As regards distribution of body hair they did not differ from the ordinary run of Europeans. The hair inclines to grow low both on their foreheads, which are somewhat receding, and on the nape of the neck, particularly in Charles, the elder.

The occipital region of their heads, particularly in the elder brother, Charles, shows a peculiar kind of flattening, which can be most truly described as Tahitian.

As regards stature and proportion of body there is apparently no great difference between the average Briton and Tahitian. Tera Poo's skeleton has a stature of 1,705 mm., corresponding to 1,725 mm, in life. He must have stood about 5 feet 8 inches in life, near the British average. The standing height of the elder brother, Charles, is 1,690 mm. (5 feet 6½ inches), Edwin, the younger, 1,724 mm.—practically the same height as Tera Poo. They are men rather above medium height. Their sitting height—length of body from the crown of the head to the level of the ischial tuberosities—is 893 mm. in the elder, 884 in the younger. The shorter man has the longer trunk; the younger brother's greater height depends on his longer lower limbs. In the elder brother the "head-trunk" length represents 52.8 per cent. of the total stature; in the younger 51.3 per cent. The length of the lower limbs, measured from the apical point of the great trochanter to the sole of the foot, was 877 mm. in the elder and 925 mm. in the younger brother, these amounts being respectively 51 per cent, and 53 per cent, of the standing height. Both have relatively long bedies. The total length of their upper extremities was estimated in

the following manner: The total span of the elder brother is 1,684 mm., of the younger 1,763 mm.; in the first case the span is 6 mm. less than the standing height, in the second it is 39 mm, more. The younger brother has absolutely and relatively the longer limbs. If we deduct from the span the distance between the outer ends of the clavicles we obtain the sum of the combined length of the two arms. In the elder, the biclavicular width is 300 mm., in the younger 295 mm.; in the elder the combined arm length is 1,684-300=1,384 mm.; the arm length $\frac{1,384}{2}=692$; in the younger 734 mm. In the elder the length of the upper limb is rather less than 80 per cent. of the lower; in the younger it is \$2 per cent. There is no exceptional feature in these figures, nothing which helps us to determine a preponderance of either Polynesian or European elements in the two Youngs. Nor do the relative proportions of the various segments of the limbs help us. In the following table are given the length of the various segments of the upper and lower limbs:—

			Femoral Length.	Tibial Length.	Humeral Length.	Radial Length.
Charles			400 mm.	363 mm.	282 mm.	250 mm.
Edwin	-	-	432 mm.	372 mm.	312 mm.	265 mm.

In both the tibia is relatively long compared with the femur; in Charles it is exceptionally long (90 per cent.), in Edwin 86 per cent. The radial (forearm length) represents 88 per cent. of the humanal length in the elder and 85 per cent. in the younger brother. It will be noted that the tibial and radial lengths in the elder brother are remarkably great.

While the measurements and proportions of the body give us little or no help in deciding whether the British or Polynesian characteristics predominate in the two brothers, it is otherwise as regards the shape of their heads; in head form they are preponderantly Polynesian. We have seen that they are Polynesian as regards their olive skins and stiff dark hair. In the proportion of their limbs, Tera Poo, the Tabitian, and the Youngs are not unlike. The outstanding feature of the Tabitian head is the flattened and high occiput (see Fig. 1). The Pitcairn Islanders have the Tabitian occiput and also the Tabitian dimensions and proportions of head. In Charles, the elder, the maximum length of the head is 177 mm., its maximum width 144 mm. To obtain the actual length of the skull we must deduct, according to Dr. Anderson, 8.6 mm. from the length and 10.5 mm. from the width, giving a eranium of remarkably small dimensions—only 168.4 mm. long and 133.5 mm. wide-with a cephalic index of a fraction over 79. In Edwin the head length is 179 mm., the width 144 mm.; making the necessary deductions we obtain a cranial length of 170.4 mm., a cranial width of 133.5 mm., a cephalic index of a fraction over 78. The corresponding measurements of the Tabitian's skull are: length, 176 mm.; width, 137 mm.; an index of 77.8. In actual and relative measurements the Pitcairn Islanders have the cranial characters of the Tabitian-not at all those of the average Englishman. As regards the height of the cranial vault, as estimated by the height of the vault above the auditory meatus, there is also a Tahitian resemblance. In Charles the auricular height is 124 mm., in Edwin 115 mm.; 7.2 mm, has to be deducted from that amount to obtain the cranial measurement (Anderson); the corrected auricular height in Charles is thus 116.8 mm., in Edwin 107.8 mm. In the Tahitian skull the length and width dimensions are greater than in the Pitcairn Islanders; so is the agricular height, viz., 122 mm. With these three neasurements-length, width, and suricular height-we may apply the Lee-Pearson formula and obtain an estimate of the cranial capacity. In Charles the cranial capacity is calculated to be 1,300 cc., in Edwin 1,250 cc. In the Tahitian we know from direct measurement that it was greater than in either, viz., 1,400 cc. When it is remembered that the mean capacity for Englishmen is about 1,490 cc., and for Polynesians about 1,470 cc., the relatively small cranial capacity of these two Pitcairn Islanders will be appreciated as a matter worthy of attention. They fall far short of the Polynesian average. The actual size of their brain is probably under, not over the estimate, for their foreheads are receding, and the measurements are likely to give an over-rather than an under-estimate of brain size. Now, although we cannot say that there is, in every case, a direct relationship between size of brain and degree of intelligence, yet there is a general correlationship between these two factors. Visitor after visitor to Pitcairn has remarked on the lack of intelligence exhibited by a certain proportion of the Islanders. If the two men brought home by Mr. Routledge are representative of the Pitcairn population, then

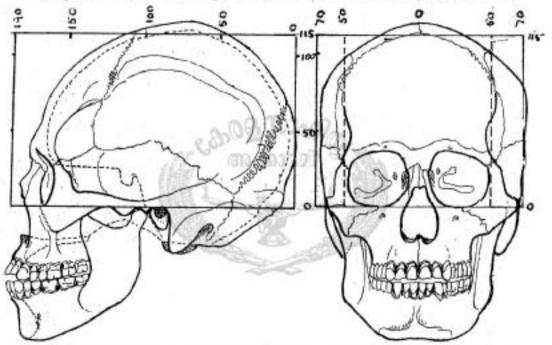


FIG. 1.—PROFILE AND FULL-FACE DRAWINGS OF THE SKULL OF THE TARITIAN, TERA POO.

there is a sufficient explanation for some of the observations made by visitors to the
islands.

Is their small-sized brains the result of interbreeding? We know nothing of the size of brain or degree of intelligence possessed by the mutineers and Tahitians who became isolated from the rest of the world in 1790. We know that most of the mutineers were dissolute men, but we have no reason to suppose that they lacked initiative. We cannot reasonably adopt the popular belief that the reduction in brain-size is due to inbreeding, for, as I have already indicated, there are at least five British strains, and a probably greater number of Tahitian strains are conjoined in the constitution of the two brothers Young. Nor have we say evidence which leads us to believe that there was any small-headed mutineer-type which has become dominant in these men. The only hypothesis that seems worth inquiring into is one which supposes the size of the brain to be transmitted through the female rather than through the male line, but in this case we have to suppose that it is

the female rather than the male Tahitian cranial capacity that has been inherited by the two brothers. Apparently mental ability is exhibited by the female side of the Young family. That is in keeping with the hypothesis I put forward,

How near the cranial outline of the elder brother Charles agrees with the peculiar Tahitian cranial type may be seen from Fig. 2. In that figure I have used a tracing of the profile of the head of Charles and placed within it, on a slightly diminished scale, the profile of the cranium of Tera Poo. There cannot be a doubt that they possess the same peculiar form. In the case of the younger brother this is true to a less extent; in him there are two English features-a lowness of vanit and a slight tendency to an occipital prominence. In the case of the facial skeleton the cases are reversed-Charles is the more English, Edwin the more Tahitian.

In shape of head, as in colony of skin, the Youngs are Tahitian; in size of brain they fall far below both the Polynesian and British average. We now propose



FIG. 2.—OUTLINE OF THE PROPILE OF CHARLES TOUNG'S READ, WITH A PROFILE OF THE CRANIUM OF THE TABITIAN, TERA POD, PLACED WITHIN IT.

to examine their facial features, in order to ascertain which stock they favour. Their faces are remarkably short; to some extent this must be regarded as due to the premature loss of teeth, with consequent absorption of their sockets. upper face length, measured from nasion or root of the nose to the point where the roots of the upper central incisors were fixed, the alveolar point, is 58 mm. in Charles, 61 in Edwin -a Polynesian rather than a British measurement. Tahitian skull, that of a young man with a sound and complete set of teeth, the upper face теалигея 68 тт. The total length of the face, from masion to lower border of chin, is 102 mm, in Charles, 99 in Edwin; the total length of the face is also abnormally low. In the Tabitian skull the total face length is 120 mm. On the other hand, the face width-bizygomatic width - is considerable,

[August, 1917.

129 mm. in Charles, 136 mm. in Edwin. In Englishmen the width of the face -bizygomatic diameter-has a mean of about 130 mm. In the Tahitian skull it is 125 mm. In order to compare the measurements made on the Youngs, a certain amount has to be deducted on account of the soft parts covering the zygomatic arches. If we allow 8 mm. for soft parts, the width of the bony face in Charles may be estimated as 121 mm., in Edwin as 128 mm. The faces are not absolutely wide, only relatively so if we take into consideration their short length. In size and shape Charles' nose is almost European; in Edwin there is a fullness in the alar regions of the nose that one often sees in Polynosians, but rarely encounters in Europeans.

The length of the nose, measured from the nasion to the lower border of the nssal apertures, is 48 mm. in Charles, 51 mm. in Edwin, 54 mm. in the Tahitian skull. The width of the nose at the ale is 28 mm. in the first, 35 mm, in the second; Charles has inherited the European, Edwin the Tahitian nasal shape and dimensions. Indeed, in his wide face and prominent cheek bones there can be no doubt that Edwin retains the traits of his maternal ancestor, Charles those of his paternal ancestor. The Tabitian nose is wider than the European. In the Tabitian skull the anterior nares measure 27 mm, in width-equal to an alar width of 32 mm. In the elder, Charles, the anterior nares are shaped and situated as in Europeans. They are elliptical openings 14 mm, in their long axis and 5 mm, in their transverse and shorter diameter. They are situated on each side of the narial septum, approximately parallel to each other. In the younger, Edwin, they are shaped as in negroid races, the apertures diverging as they retreat towards the bases of the alse. The long axis of each aperture measured 18 mm., the narrower diameter being 8 mm., as in the elder brother. There are other features of their faces which I think desirable to place on record. In both the eyebrow ridges are prominently developed; so is the glabellar region. In Charles the width of the forehead - measured between the outer ends of the supra-orbital ridge, or malar processes of the frontal-is 99 mm., in Edwin 111 mm., in T.S. (Tahitian skull R.C.S.) 103 mm.; the minimum width of the forehead in the first is 95 mm., 99 mm. in the second, 93 mm. in the Tahitian skull. All of those measurements are in proportion as regards the size of head possessed by the Islanders, but compared with heads of average dimensions are absolutely small. A narrow forehead is a Tahitian rather than a European feature.

There is a remarkable feature of the Tshitian skull which I suspect to be a racial characteristic, namely, the narrowness of the inter-orbital septum, which, of course, forms the upper part of the nasal chamber. In the Tahitian skull the distance between the lachrymal crests is only 15 mm.; the mean distance in the English male is 20 mm.; in the elder Young the distance is 18 mm., in the younger 19 mm.; both take after the Tahitian rather than the British in this respect.

As regards the chin, the Tahitian is receding. In neither of the Youngs is this the case, but there is no doubt that the removal of teeth will bring a chin of medium development into prominence. Another feature which can be measured with some degree of accuracy is the lower breadth of the face—measured between the angles of the mandible—the bigonial width. In modern English skulls the mean bigonial width is a fraction over 99 mm. When covered by soft parts the same width is about 108 mm., allowing 9 mm. for the increase caused by the flesh. In Charles the bigonial width is 101 mm., in Edwin 100 mm.; representing a bony width of 92 to 93 mm. In the Tahitian skull the bigonial width is 98 mm. Thus in the absolute dimensions of the lower width of the face, as in cranial capacity, the two Pitcairn Islanders falt below the mean of both British and Tahitian.

The ears of the two brothers are remarkably slike, not only in dimensions but also in detail of shape. In both the lobule is but slightly developed, and is completely adherent to the cheek. In both the length of the ear, from upper border to lower edge of lobule, is 60 mm. Its width, measured from the base of the notch at the upper border of the anti-tragus to the posterior border, is 28 mm. The border of the helex is involled to the extent of 5 mm. There is no trace of a Darwin's tubercle. There is no distinctive feature here, except that such an adhesion of the lobule is less common in England than in Polynesia.

I now return to certain features of the physical development of the body. In European and Polynesian alike there is a robust, muscular and skeletal development. The two brothers have a splendid physique; their brues are well formed and capable of being dexterously and strenuously applied. The circumference of the arm at the bicsps in Charles is 270 mm.; in Edwin 242 mm. In the lower limb each has a circumference in the middle of the thigh of 450 mm.; round the calf Charles measures 327 mm., Edwin 324 mm. They have the muscular development of athletes. Across their shoulders, from one acromion process to the other, Charles measured 403 mm., Edwin 390 mm.—wide-shouldered men. At the level of the sterno-ensiform junction, Charles' chest had a back-to-front diameter of 159 mm., a side-to-side diameter of 259 mm.—wide and flat-chested. In Edwin the corresponding diameters measured 180 mm. and 243 mm.; he was more round-chested. As in his facial features, so in his thoracic conformation, Charles favoured the European type, Edwin the Polyhesian. But in both there could be no thought of physical degeneration; in chest and in muscle they were splendidly developed.

I also obtained satisfactory hand and foot prints. Their feet at once reminded me of imprints I obtained of Spanish labourers who go harefoot or in light sandals—large feet, very wide across the sole, under the heads of the metacarpal bones. In both men the great toe continues forward in a line with the inner border of the foot; a line drawn along the inner side of the imprint, so as to touch the inner margin of the heal and the pad under the head of first metatarsal bone, runs parallel with the axis of the great toe. The length of the foot imprint from the hinder margin of the heal impression to the impression of the longest toe—the second—is 235 mm. in Charles, 245 mm. in Edwin. The width of the sole, across the heads of the metatarsal bones, is 98 mm. in Charles and 101 mm. in Edwin. Edwin has the bigger limbs and the bigger feet.

While their feet at once strike the observer as being large, this is not the case as regards their hands. I made the following measurements, not from the hands themselves, but from the imprints. The middle finger is the longest; from the fold at the base of the ball of the thumb—fold on the wrist side of the themar eminence to the distal margin of the middle finger impression—measured 166 mm. in Charles, 185 mm. in Edwin, who has the bigger hands as well as bigger feet, but has the shorter trunk-length. In Charles the second and fourth flugers measured the same; 158 mm.; in Edwin the fourth was longer than the second, 175 mm. and 170 mm. As measured in the manner already stated, the thumb was shorter than the little finger; in Charles the measurements of thumb and little finger were 137 mm. and 112 mm.; in Edwin 150 mm. and 125 mm. In both the palm imprint was 82 mm. wide.

In both the prevalent papillary pattern on the fingers was of an uncommon type, and I suspect is Tahitian rather than European. Taking the pattern on the finger imprints of Charles first, one notes on the thumb a loop, with a tendency for the inner or nuclear lines to be arranged in a parallel series and shut off at the base of the loop. The pattern in the second, third, and fourth digits are also of the loop type, while in the fifth digit the lines form concentric ellipses, the innermost tending to be parallel and to assume an arrangement or type which occurs in anthropoids. The type described in Charles' little finger occurs in the ring and little finger of Edwin; in his middle and forefinger the pattern assumes a whorl or spiral arrangement. On the balls of the toes the pattern cannot be noted, except in the case of the great toe, where they assume the open triangular form:

To sum up, I regard the two Piteairn Islanders as decidedly more Tabitian than European in their physical characteristics. In facial features Charles is European, Edwin is not, yet in actual shape of head the case is reversed—Charles has the typical Tabitian head, Edwin rather the European. In colouring both are Tabitian rather than European; in texture of hair they are Tabitian rather than European. In size of brain they are typical of neither British nor Tabitian, but incline rather

to the second than to the first. But there can be no question of physical degeneration; they are both splendidly developed men.

	Team o	- M-	SUREME			
	THET C	e me	LBURENE	invs.	CHARLES.	Edwin.
					Mm.	Mm.
Standing height					1,690	1,724
Sitting height	-	-		-	893	884
Span	*			-	1,684	1,763
Bi-acromial width -				-	408	390
Length of upper limb -	-	-		-	692	760
Length of lower limb -				-	877	925
Weight			•	*	56 · 3 kilos. (124 lbs.)	554 kilos. (122 lbs.)
Head Measurements:					Mm.	Mns.
Maximum length -		-		-	177 (169)*	179 (171)
Maximum width '-	-				144 (134)	144 (134)
Auricular height -				-	124 (117)	115 (108)
Maximum mastoid diame	ter			1.0	120	124
Minimum frontal -				-	95 (87)	_
Bi-stephanic diameter		2			130 (120)	185 (125)
Face Measurements:						200008-007
Nasic-alveolar length		0.00	10-	. 4	58	61
Nasio-mental "	Over	95,111	udag),	1000	102	99
Nose, length -	65,		+	414-	48	51
Nose, width -	- (8)	3,461	13.21	4.	28	35
Supra-orbital width -	-	-	-	11.00	99	111
Width between lach, cre	sts		+-	1 -1	18	19
Interocular width -		-Fhe		J. 1	28	30
Bizygomatic diameter		755	T.	.e05	129 (121)	136 (128)
Bi-malo-maxillary width	00a	VOR			85	87
Bicondyloid width -	4000		-05	153500	117	130
Bigonial width -				-	101	100
Upper Extremity:					4.5	
Humeral length -			0.0	100	282	312
Radial length -				-	250	265
Hand, length -				100	166	185
Circumference, upper arm					270	242
Measurements of Lower Lim					7726	27.0
Femoral length -	ore s	478.45	2	12	400	432
Tibial length -			2	- 82	363	372
Length of foot -		-			235	245
Circumferance of thigh			- 1	- 6	450	450
	-	•		-	327	324
Circumference of calf	7		97	7	oer.	021
Thorax:		35	. 50		110	100
At level of 4th cost, car					159	180
At level of 4th cost, car					259	243
External car.—Vertical of			*		60	60
External ear.—Width at	antitra	gus	7		28	28
	-	1000	-	-		A. KEITH.

^{*} Measurements in brackets represent estimated dimensions for skull. I have used a slight modification of Dr. Anderson's data—subtracting 8 mm. from length, 10 mm. from width, and 7 mm. from auricular height—to obtain the "skull" from the "head" measurements.

Anthropology.

Jones.

The Arboreal Descent of Man. By F. W. Jones.

In concluding his review of Arboreal Man (Man, 1917, 71), Pro- 01 fessor Parsons expresses the hope that someone "will take up the case for the defence"—the defence, that is, of the thesis that man has been evolved from a pronograde quadrupedal mammal, in opposition to the teaching that man's ancestry is to be looked for along the lines of an arboreal stock which has retained adaptations to an arboreal life from practically the dawn period of the mammals. If this case for the defence is to be conducted to its best advantage, it is to Professor Parsons that one would wish to see the brief offered, for, as he says, he is "con-"vinced of the pronograde ancestry of man." But if he undertakes this task he must give the jury better reasons for his convictions than those he has provided in his review, or the verdict will surely go against his client. The "few instances of "many which," in the opinion of Professor Parsons, "can alone be explained by "regarding Man as continually harking back to a pronograde condition" cannot be permitted to pass unchallenged in the pages of the journal in which they appeared in print,

The first of these points is presented with some subtlety, and must appear very convincing if examined with that amount of care usually devoted to the analysis of a writer's meaning. The argument, as urged by Professor Parsons, is as follows:—

(a) The radius becomes the important bone of the forearm in pronograde mammals.

(b) Its head occupies the greater part of the lower end of the humerus, and the ulna occupies only an inconsiderable humeral articular area. (c) In orthograde and brachiating mammals the radial head is small and has a correspondingly small humeral articulation. (d) In the human fostus "the epiphysis for the capitallum still stretches " across and forms quite half of the trochlear surface for the ulna." I think that from these statements the average reader would assume that (c) the articular surface for the radial head, and probably the head itself, were relatively larger in the human fostus than they are in the adult.

A question concludes the evidence on this point—"Is not this a persistence in "the young condition of a pronograde stage in which the radial surface of the "humerus was much larger and more important than it is in the orthograde or "brachiating adult?" There would not appear to be much doubt as to the answer expected; and yet the one which I believe to be correct is not that looked for by Professor Parsons.

First, there is the inherent improbability of a forearm ever passing from a primitive type into a highly specialised type (such as is that of a pronograde), and then back again into a condition which resembles, in the most minute details, the previous primitive phase. Such a sequence of events is quite contrary to the laws of change determined by palecontologists; and even could Professor Parsons establish his case for the radius, what of the host of other features of the human body which show a similar strangely primitive condition? Have they all been altered in their passage through the pronograde stage, and then harmoniously reverted to an earlier type? But can even the case of the radius be made out? The facts are as follows:-(a) Ossification of the cartilagenous articular lower end of the humarus starts upon the radial side and spreads towards the uluar side. (b) Much of the area with which the ulus articulates is ossified from this centre. But (e) at no developmental stage of man does the radius occupy more of the articular extremity of the humarus than it does in the fully ossified bone. (d) There is no stage in which the "capitellum" is relatively larger or the "trochlear surface for the ulna" relatively smaller than in the adult. (e) Even before ossification has started at all the cartilagenous radius and ulna articulate with the cartilagenous humerus in their

proportionate adult areas. (f) There is no hint whatever, at any phase of development, of a humeral extremity of the radius which "stretches across the greater part "of the lower articular end of the humerus"—no suggestion of any harking back to a former propograde stage.

There is another question which Professor Parsons might have propounded concerning the radius and its humeral articulation. Why does the radius become such an important bone in pronogrades, and why, too, is it so important in orthograde and brachisting mammals? I am sure he will find the answer to this question in considering the influences of the arboreal babit. I will not recapitulate the evidence concerning the specialisation of the radial (and tibial) digit brought about by tree elimbing; but I would remind him that I especially pointed out in the volume in question that it was the side of the limb next to the middle line of the animal which was selected for dominance in arboreal activities. I would remind Professor Parsons that this radial specialisation is as old as the mammals, for it is well known to palsontologists that the mammalian fauna of Eocene days possessed opposable radial digits, and dependence upon the bones of the inner side of the limbs.

This was the already existing specialisation when the climbing mammals of the Eocene became more thoroughly pronograde quadrupeds. It is the importance of the radial side of the limb which leads to essification starting upon the radial side of the humeral articular area, but this importance was begot of the habits of the Cretaceous climbers, and not of any supposed harking back to the condition seen in the horse.

The other points raised by Professor Parsons may be dismissed more briefly. I have insisted throughout that man, and more especially the forearm and hand of man, exhibit singularly primitive mammalian features. That is my point, and Professor Parsons greatly strengthens my position when he cites a muscle such as the flexor profundus digitorum which shows "atavistic variations in Man only to be "found in such generalised pronograde types as Erinaceus and Gymnura among the "Insectivors." Homo shows these resemblances in forearm musculature to Erinaceus and Gymnura because they are "generalised," but not because they are "pronograde."

The other muscle to which Professor Parsons draws attention is the serratus magnus, and his arguments concerning it are so exactly along the lines which I have stigmatised, in Arboreal Man, as fallacious that I am willing to leave them to the judgment of any lay person. This muscle is, as he says, small in Amphibians and reptiles, but large, because function demands it, in pronograde mammals. In man it is less extensive than in the typical pronograde mammals, but the assumption that therefore "it is partly disappearing in Man" because man has ceased to be a pronograde is, I believe, quite unwarranted. The last anatomical evidence brought forward by Professor Parsons concerns the middle gleno-humeral ligament of man; that point I am prepared to leave in the hands of anatomists generally. Any view as to the phylogeny of man which needs to fall back for support on evidence derived from the so-called middle gleno-humeral ligament as seen in the shoulder joint of man fails to retain my confidence.

I trust that Professor Parsons may be persuaded seriously to undertake the defence of the thesis of the pronograde origin of man, and that he will do it solely from the great wealth of anatomical knowledge which he possesses; refraining from making any attempt to represent that one who holds very different views stands revealed in clever evasions because he has tried to produce an honest simplicity in his diagrams.

F. WOOD JONES.

West Africa.

Migeod.

Antiquity of Man in West Africa. By F. W. H. Migeod.

In my article published in Max, 1916, 36, on a presumed palscolith from Ashanti, I referred to some ancient pottery I had uncarthed at Ejura.

I have recently made a further discovery at Ejura (60 miles north-east from Kumasi) entirely confirming, I consider, the antiquity of what I had previously found. The site is about three-quarters of a mile from the other and on the same contour. A big pit had been newly dug behind the Rest House for rubbish, and on examining it I noticed on one side the outline of an earthenware pot. Its capacity must have been about 2 gallons. The lip is nearly 8 inches wide, and the material yellowish and rather thin. The thinness may, however, be due to disintegration. Its outline is roughly as here indicated, the dotted line representing

its presumed continuation when still unbroken. The rock in which it is embedded is red clay.

There are 9 inches of vegetable mould on top, and the fragment lies about 18 inches below the upper surface of the clay. A couple of feet away from it, and on the same level, lies a piece of a black not about 2 inches long.

The clay is free from stones and absolutely undisturbed. The ground slopes gently towards a stream about half-n-mile away at a grade of about 1 in 40-50, and the rise behind is scarcely worth considering. The vegetation is grass with open-country species of timber, but there are patches and tongues of the usual "dense" forest close by and along the stream.

It would seem that the clay must have been in process of deposition whilst man was already living in those parts, and that the broken pottery had fallen in during deposit. The clay bed extends all the way to the coast, some 200 miles off, and rests apparently everywhere upon sandstone. The great ridge known as the Mampong Scarp, 30 miles north of Kumasi, would seem to be a recent upheaval, as the clay bed lies on the top as well as below it.* The upheaval would, therefore, seem to have taken place after the country became inhabited.

F. W. H. MIGEOD.

REVIEWS.

India: Religions, Ethnology.

Ramaprasad Chanda.

The Indo-Aryan Races: A Study of the Origin of Indo-Aryan People and Institutions. Part I. By Ramaprasad Chanda, B.A. Pp. 274. Bajshahi, Varendra Research Society, 1916. Price 7s. 6d.

The Varendra Research Society, established to investigate the religions, ethnology, and folklore of the new Provinces, Bihar and Orissa, has already issued some Sanskrit texts, and now opens its English series of publications with the present volume, which forms the first part of the work. The intention of the book is, we are told, to supply a monograph on the origin of the Bengali people. This question, however, is dealt with only incidentally in the present volume, which consists of a series of essays on "The Aryas and Anaryas of Vedic India," "Indo-Aryans of the Outer Countries," "Race and Cult—Vaishnavism," "Race and Cult—Saktism," "Race and Caste—the Brahmans of the Outer Countries," "Indo-Aryans and Iranians." The scheme is thus sufficiently ambitious, and a study of the book suggests that, instead of discussing, necessarily with insufficient detail, the leading problems of Indian religions and ethnology, the author would have attained greater success if he had devoted himself to the special question which it was the object of the Society to investigate.

The path which he has followed is already well trodden, and practically all the information in early Hindu literature which is of value for the purpose has already

been collected and translated in publications like Dr. J. Muir's Original Sanskrit Texts and in the Vedic Index of Professor Macdonell and Keith. At the same time, the author shows that something remains to be collected in the byways of Sanskrit literature. He has read widely, and some of his theories and comments, presented in a scholarly and modest way, deserve consideration. Thus, he thinks it unreasonable to suppose that the Sudras were recruited solely from the aborigines or Arvans of the north, and professes to derive them from the Nishāda or forest tribes.

Contesting the current view that the Yadavas were a Panjab tribe, he finds their home in Saurashtra or Käthiawar, and, without producing much new evidence, connects them with the Mutanmi, who worshipped gods with Vedic names, Mitra, Varuna, and Indra. In support of their western origin he refers to a Babylonian seal now in the Nagpur Museum. But its provenance is uncertain, and it may have drifted to India in the course of trade. He rightly rejects Risley's theory that the round-headed strain among the Mahrattas was due to an Indo-Scythian migration into the Deccan, and he protests against the suggestion of the same writer that this similar strain among the Bengalis is due to Mongoloid influence. He seems inclined to find these "Aryan" roundheads among Rieley's "Turko-Iranians." He doubts the existence of a Christian element in the Krishna Saga, and prefers to connect it with the Perseus legend. In the same connection he shows, apparently with success, that the view of Krishna being a vegetation spirit is due to a misunderstanding of a passage in Patanjali. The essays on religion present little novelty, but he protests against the supposition that there is little sectarianism in modern Hindulsm, on the ground that persons professing an eclective form of belief have never undergone the rite of initiation by a Guru. The essay on the Iranians also follows well-known authorities. The work as a whole is interesting, and students of early Hindu and Ethnology will look forward to its completion. It may be hoped that the second part will be provided with an index. In the forthcoming portion of the work the author may be advised to devote more space to the ample materials in his Province, a sphere to which the new society will do well to confine W. CROOKE. its investigations.

Africa: West. Thomas.

Anthropological Report on Sierra Leone. By Northcote W. Thomas, 92
M.A., F.R.A.I., Government Authropologist. (Part I.—Law and Custom of the Timne and other Tribes. Part II.—Timne-English Dictionary. Part III.—Timne Grammar and Stories.) London: Harrison and Sons. 1916.

In these three volumes Mr. Thomas continues the series of studies of West African customs and languages which he began in the Report on the Edo-speaking

People (1910), and continued in that on the Ibo-speaking People (1913).

The first part of the present Report deals mainly with the law and custom of the Timme, who occupy one of the largest areas of the Sierra Luone protectorate; but brief accounts of the law and custom of other tribes are added at the end of each chapter. After a short introduction on the geographical features and languages of the region, Mr. Thomas discusses the demography as shown by detailed genealogies of the families of over two hundred and seventy men. As polygyny is the rule among these peoples—one of Mr. Thomas's informants had fifty wives, and was himself the son of a man who had sixty wives and a hundred children—the information obtained affords evidence as to the effect of this custom on the ratio of the sexes, and confirms the results obtained in Nigeria, that polygyny favours an excess of male births.

The position and prerogatives of the paramount chiefs are briefly dealt with, and six chapters are then devoted to religion and religious practices. In religion

the primitive paganism and ancestor-worship seems to have been modified by the influence of Islam, though not to such an extent as to disguise its main features. Some of these have, however, put on an Arab mask. The primitive deity Kurumasaba has been confounded with Allah, and the minor spirits or kriff with the jin. Ancestor worship is performed on Friday in certain months, and the wicked dead go to Yehanum (Gebenna). Mr. Thomas discusses these beliefs in detail with the ceremonial of witchcraft, offerings, ritual prohibitions, divination, ordeals, and dreams.

An important section of the book is devoted to marriage and its regulation. Kinship tables are given in the seven principal languages of the colony. Birth and burial customs are described, the latter apparently influenced in some places by Muslim practices, such as the offering of prayer, sacrifices at stated times, and the discharging of the debts of the dead person. Totemism in a modified and decadent form was found by Mr. Thomas to exist, but to be of small importance. In the Timne country the clan name is appended as a kind of surname to that of the individual. Though the rule for marriage outside the clan was observed, it was not strict. Respect was shown to the totem by not eating it, if an animal, and by not burning it, if a tree.

Considering the importance of the scoret societies in this part of Africa, the accounts given by Mr. Thomas seem somewhat meagre. For this he is probably not to blame, for native fear of the white man's law, and official reproduction of secret practices combine to render inquiry regarding these societies one of the most difficult tasks of ethnography. The Poro of the Sherbro people and the Rab'cule are the most fully described.

Law, Slavery, and Inheritance are dealt with in three short chapters, and there is an interesting account of farming and various technological processes.

This part concludes with a note on the Botanical features of Sierra Leone by Dr. O. Stapf. It is illustrated by a map and twenty plates reproducing more than thirty photographs, and contains an index.

Part II of the Report consists of a dictionary of the Timne language founded partly on Mr. Thomas's own collections, and partly on some unpublished manuscripts by Schleneker and Knödler, belonging to the Church Missionary Society. Part III comprises a Timne Grammar and a collection of twenty-seven native texts (twenty-six tales and a conversation) with interlinear translation. They were partly recorded on the phonograph, and partly taken down from dictation.

This short summary shows that the Report forms a worthy companion to Mr. Thomas's records of the Edo- and Ibo-speaking peoples. It cannot fail to be of use both to the anthropologist and to the official dealing with natives. It is to be hoped that Mr. Thomas may be able to carry on his researches in territories both east and west of Sierra Leone. Much has yet to be learned from Gambia, and the customs and law in Nigeria, north and south, require more record than is contained in the reports on the Edo and Tho.

SIDNEY H. RAY.

ANTHROPOLOGICAL NOTES,

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

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(Donor indicated in parentheses.)

A Survey of Ancient Peruvian Art. By Philip Ainsworth Means. 9½ × 6.
17 Plates. (Reprint from Transactions of Connecticut Academy of Arts and Sciences.) Yale University Press, Connecticut. 1917. (The Author.)

Desc-Ponds, History, Observation and Experiment. By Edward A. Martin. 71 × 5. 206 pp. Illustrated. T. Werner Laurie, Ltd. 6s. net. (The Author.)

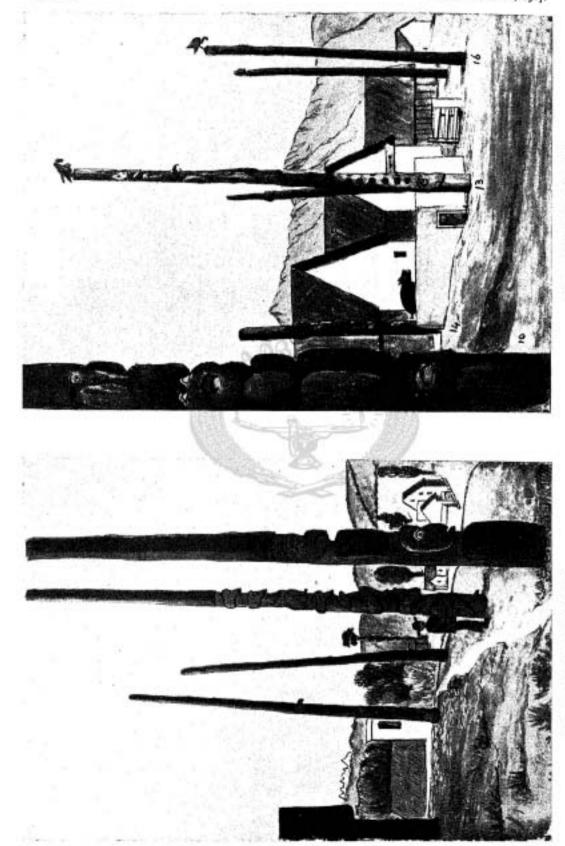


FIG. 1.-FOLES AT HAZELION, D.C.

ORIGINAL ARTICLES.

America, North.

With Plate I-J.

Breton.

Tsimshian Orest Poles at Hazelton and Kishpiox, B.C. A. C. Breton.

A few notes and sketches made in October 1916 may be worth recording now that the crest-poles of northern British Columbia are decaying and are not likely to be replaced.

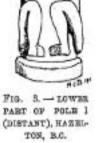
On the voyage from Vancouver to Prince Rupert the only poles seen are at Alert Bay, an island harbour near the north end of Vancouver Island. Unfortunately the direct steamers do not stop there. Otherwise the coast, both of mainland and islands, is mountainous and covered with thick forest. Approaching the new port of Prince Rupert, many ancient village-sites are noticeable on the shores of the neighbouring islands, from the bright green colour of the clam-shell heaps. Prince Rupert itself was dense forest until 1907, but is now cleared in the deadly way enstomary out west, leaving only six miles of rock and bog. The Grand Trunk Pacific goes from there along the water's edge to the entrance of the great fiord of

the Skeens river and up that for some hours, passing fish cameries where the Indians work in summer. Formerly it was a fortnight's voyage in a large cance from Port Essington, at the mouth of the

Skeens, up to the forks where the Bulkley joins it.

There is no sign of Indian life until Gitwingak (or Kitwanga as the railway calls it), is reached, about 168 miles from Prince Rupert, and in the drier, more open region with great mountain masses, where the rivers have cut secondary valleys through vast accumulations of debris, and hunting and fishing are easy. The various missionary enterprises divided the villages amongst them, and Gitwingak does great credit to the Rev. A. E. Price (Church of England), who was there for many years, built a good church, and printed a useful primer or Gitkelan Render, all done by Indian help. Across the river, about 14 miles below Skeens Crossing, is another village with poles.

Hazelton is a few miles further, un a delta, where the Bulkley and Skeens join. The Indian name was Kitanmaksh (fishing by torehlight). It was a Hudson's Bay Post in the midst of the Indian reservation, to which the greater part of the site still belongs, though most of the Indian houses are on a bank above the Skeens. They are small, modern houses, the old barn-like ones Fig. 3. - LOWER. that held a family in each corner, with the fire in the middle, PART OF FOLH 1 having been abandoned. The poles are in front of the latter, and (DISTANT), HAZELare said to have been carved about thirty years ago by a man



from Naas, though they are so moss-covered, split, and worm-caten, that it was difficult to believe this. In the sketch (Fig. 1) the details of the two farthest do not show. The second has some cleverly carved animals climbing on it. The end one (Fig. 3) has a seated figure with grotesque face, and hands in the typical Mexican gesture for eating, but were said by an Indian informant not to mean that, though he could not give the actual meaning. Above, three small seated figures, with hands raised, the palms outwards, were said to be praying. Still higher is a human figure with small faces incised on the shoulders, elbows and knees, and outstanding beak. The most interesting of these poles is, by the road, where is also a short hollow pole with rudely carved animal head on top.

The cemetery, on the plateau above, has many very curious little burial chapels, in which the clothes, portraits, and boxes of the dead, are displayed. There are some small but certly modern tombstones, one to a "Chieftess," and some wooden demeshaped crections, like Turkish graves. The wooden walls of the old houses were lined with fine bark matthing, the doors and frames painted red. Since the coming of the railway and influx of miners and would-be settlers, the Indians are said to have become discontented, no longer feeling sure of their agricultural lands nor of their hunting-grounds. Mrs. Field, the rector's wife, has lived thirty years at Hazelton, where for long she was the only white woman, and could tell much of the people and their ways. Dr. Wrench, at the bospital, has a good collection of stone implements, spoons, rattles, masks, &n., and a statuette of black slate, in thickly plaited kilt, with rattle in right hand and small stick in left.

Kishpiox is a Methodist village on the Skeena, nine miles above Hazelton by a bad road. Church and school are at one end, so the large open space in the centre remains in its primitive state. There is a row of houses on the north side, their gable ends facing the square, with enclosed graves and crest-poles in front. The south side has only a few houses and two poles, one said to commemorate the carrying off of a woman by a man of another tribe. After a time she killed him and came back with her baby. My informant, a half-breed, owner of a ranch near by, was able to give information about the carvings on the poles, assisted by an Indian who was lounging there (who spoke no English), most of the inhabitants being away hunting. As at Hazelton, these poles are unlike those in museums. The figures are more natural, and often very spirited, especially animals known to the sculptor, showing not only great skill, but also a sense of humour. Positions of the hands are so varied that it seemed worth while to note them carefully, though unable to learn the import. Female figures are never carved.

The principal pole had the form of a flagstaff, 80 feet high, painted with a long black stripe proceeding from a black head with white eyes, at the base of the staff, and represented a snake. On a small enclosed platform in front of this were two carved wooden figures—one "the grissly bear under the sea" (mcdegum tecchalis), the other a finback whale.

NOTES ON THE FIGURES

(Beginning at the west-end of the row, and in each case from the base upwards),

- Fele L.—(a) Figure with animal head, hands held up, palms outward, fingers element; (b) hands elutehing the body in front; (c) left hand round leg; (d) beak for nose, hands crossed on breast, feet turned inward; (d) bird. A plain space above.
 - 2.—Has some red colour remaining. (a) Human figure, hands held up, palms outward, thumbs up, fingers straight down; (b) bird, red, wings with feathers indicated; (c) bird with outstanding beak; (d) human figure with outstanding beak; (e) plain piece; (f) bird (duck or goose!) in full relief on top. Grave in front.
 - 3.—(a) Two fregs elimbing; (b) animal facing down; (c) human figure with uplifted hands; (d) bird; (e) frog facing down; (f) human figure, hands praying.
 - 4.—(a) Human figure standing; (b) two human figures sitting, hands eleuched, ears on top of heads; (c) human figure standing, beak, breast ornament of a mask like those of jadeite in Central America, hands bent towards each other; (d) seated figure, grotesque fact, ears on top; (c) long straight piece; (f) bear carved solid on top.
 - 5.—(a) Owl; (b) five small standing figures, black legs—from waist up the bodies were blue, with red lips and nostrils; (c) black animal with faces in relief on hands; (d) bird standing on top.
 - Hollow at back, with separate piece fitted in. (a) Standing figure, arms bent outward, hands raised. A stated figure on each side.
 - 7.—Seated human figure, hands clasped round legs. Rest plain.
 - 8.—Three owls, one above the other, with small owl-heads between; the ears of the top one have a face incised in each; a bird on top.
 - 9.—(a) About 3 feet width of a chamond pattern, the edges deeply incised, the diamonds raised, said to represent matting; (b) three rows of circles, "young moons, young sime"; (c) owl with an eye carved on each wing.

- 10.—(a) "Something that grows in the wood, extable," a shapeless object; (5) and (c) two large owls; (d) smaller owl holding baby.
- 11 .- Seated figure with praying hands; rest plain.
- 12.—(a) Scated figure, hands on chest, right one highest; (b), a sort of Maltese cross formed of four small standing figures, their feet meeting, total no has; (c) standing figure, hands praying; (d) well facing downward.
- 13.—Carved right up. (a) Finback whale, head down, big eyes, fin on back outstanding; (b) standing human figure, hands on body; (c) land otters facing down; (d) bird; (d) small figures; (f) and (g) scattel figures. Dird standing on top.
- 14.—This is hollow at the back. (a) and (b) Owls; (c) man standing holding a small figure; a platform in front (see sketch, Fig. 2), has a grixely bear under the sea, with benches round.
- 15,-One figure high up, rest plain.
- 16.—(a) Seated figure; (5) frog, with water below; (c) another frog, both with heads down; (c) animal; (d) four men drawn up towards an eagle on top.

Some graves had modern tombetones. Of the few people seen, a stately dame recalled those of the Mixtoca of Oaxaes, and a man walking with his family gazed with repugnance at the motor car.

Hagwilget, a Roman Catholic village of the Dene (so fully described by Father Morice), is a few miles from Haselton on the other side of the Bulkley canyon, crossed there by a remarkable Indian wooden bridge, no longer in use, made somewhat in cantilever fashion. This village has no poles but boasts a fine new bell, with inscription. I was there on a Sunday afternoon, and some of the women were sested outside the little church, neatly dressed, very, clean, and with courteons manners, but no English. Hagwilgot means "steady-going people" in Tsimshian, and they look it. Strong baskets are made there of thick bark bent into shape, ornamented with diagonal toothed bands scraped to show a different surface.

Two recent books* give much interesting detail respecting these Indians, the nothers' lives having been spent in the effort to bring out the fine qualities and capacities dormant among them. At Bella Bella the Indians made wharves, put down side-walks, and imposed taxes to improve the roads. At Port Simpson they were taught printing and had a little paper, below in 1882. Dr. Crosby organised a fire company; musical instruments were bought by subscription, and a brass band made splendid music. As in Mexico, every Indian village now has its band. Worth noting is, that Dr. Crosby taught the Haida to rib cances with small cedar sticks, and later showed them how to steam the ribs. Before, the cances were liable to split in a storm. He says:—

The upper Skeens people speak of a time when the Haida, Tsimshians, and some Tlinkits all lived a few miles below the Forki (Hazelton), and point out the locality. There were thousands of people, and they had traps across the Skeens and pleuty of fish. But a great flood came and the Haida went to Queen Charlotte Islands, while the Kit-Khatlas and Tsimshians stayed at the mouth of the Skeens in summer, and at old Metlakatla and Nasa in winter.

The accounts of the crest poles by both authors should be consulted by anyone wishing first-hand information. Dr. Collison describes the carving of one very elaborate pole and the

apparently reckless way in which the Indian cut and haved with a large axa. "Where is your plan, are you not afraid to spoil your tree?" "No; the white man, when about to make ony"thing, first traces it on paper, but the Indian has all his plans here," pointing to his forehead,
Having cut out the outline roughly, he then proceeded to the finer workmanship with an wise,
finally polishing with the dried skin of a dogfish.

A. C. BRETON.

Up and Doon the Paople Coast, T. Grosby, D.D., 1913. In the Wake of the War Cause, Archdencen Collison [no date, but new in 1916].

South Africa.

Bryant.

The Zulu Cult of the Dead. By the Rev. A. T. Bryant.

According to Zuln philosophy man is composed of two parts, the body (mmZimba, pl. imiZimba) and the spirit or soul (iDlozi, pl. amaDlozi). Besides these, there are the inTliziyo (heart, feelings, mind), the iKanda or inGqondo (brain-power, intellect, understanding, memory, mind), as well as a hazily defined something called the isiTunzi (shadow, personality), which may have been originally one and the same thing as the iDlozi or spirit. But whether all these things are attributes of the body or of the soul, of the umZimba, or of the iDlozi; and whether at death they die with the former, or depart with the latter, does not seem clear to the Zulu, although the last hypothesis (that they accompany the departing spirit) would seem to be that which would most logically follow from other tenets of their belief.

The Zulu religion makes no definite statement on the doctrine of the immortality of the soul. The soul survives death, and is offered sacrifice practically continuously throughout an indefinite period of time; but how long it will continue to live, and whether or not it will endure for ever, is not defined. A man dies; but only in the fiesh; his spirit (iDloxi, pl. amaDloxi) still endures. Whither, then, does it betake itself? Neither does it soar to the skies, nor does it go down into the grave and rot with the corpse. It enters neither into the forest tree nor into river pool, nor into the living body of other man or heast. But if it does not hark back unto the bosom of Nhuluwhulu, its Maker, it certainly does botake itself where he, and every succeeding ancestor betook themselves, namely, to the nearest velt. There it becomes changed; and having shuffled out of one corruptible body, it now proceeds to put on another. In due course it reappears in visible form, in the guise of a snake. It does not enter into the body of any already existing snake, but simply materialises into one.

To kill one of these spirit-snakes was no doubt in former times an infringement of the native moral code. But how discriminate? Can they, then, be distinguished? They can; for the spirit-anakes form well-defined species, and all are harmless. The iNyandszulu (pl. iziNyandszulu), bright green of colour with black spottings on the upper body about the neck, is, if fully grown, always the spirit of a man of importance, a kraal-head or even a chief. When still young, being then not more than half an inch in thickness and a couple of feet long, it is a frequent and fearless visitor of the kraal fences, where it may often be seen moving leisurely about or basking in the sun. At that size it is regarded as the spirit of a man of insignificance, or even of a male child. The natives apparently suppose this small iNyandezulu to be a distinct species, and so usually call it, not by the former name, but umHlwazi (pl. imiHlwazi). The short, brown uMabibini (pl. oMabibini), also called um Zingandhlu, very foud of taking up its abode in dark nooks within the hut, is the spirit of a female generally; though an old woman may take to herself the more imposing form of the large brown um Senene (pl. imi Senene), likewise occasionally called an umHlwazi. Some aged females, however, seem to object to becoming snakes. These prefer the guise of little lizards (isi Cashahazana pl. izi Cashakazana), which have the habit of climbing up to the roof inside the huts, then, losing their hold, fall upon anybody scated beneath. animals, being spirits of the dead, are, according to their rank, treated with due respect and never molested-at least, were not, until the Zulu came under white influence.

The only spirits that now really matter, that actually enter into the practical religion of the present-day Zulu, are the spirits of his father, his grandfather, and his other immediate ancestors. These he feels he knows, and they alone, he

assumes, have any present interest in him. From them he received his being. Them alone he fears, and from them alone all blessings and all curses flow. Practically there is only one demand they make upon him—namely, that he provide them with the regulation supply of ment, in other words, that he religiously discharge his duties, as prescribed by law (i.e., tribal custom), in regard to the sacrifices to the dead. Any neglect will certainly meet with their strong disapproval, and will be followed by drastic reprisals. Their displeasure will always take the form of some misfortune befalling either him or his. Now they may rob him of a dear child or two; now they may deny his wives the blessing of offspring—for it is the prerogative of the ancestral spirits to mould the child in the womb; or, again, they may bring down on him or his family disease which the doctors will strive in vain to cure, till his obligations to his deceased forefathers are duly discharged.

But how shall he know whether the evil be the work of spirit or of human agency? The Zulu religion has furnished a device, which takes the form of an ornele, everywhere at hand, and at the present time accessible to all at the cost of one shilling. This oracle is established in the person of the abaNgoma (sing., um Ngoma), popularly called witch-doctors, though more, correctly spirit-diviners or necromancers. These are not the priests of the cult, for they do not officiate at the sacrifices, nor are they medical doctors or herbalists, a quite different and wholly civil profession, though both classes, in the Zulu language, are frequently called by the same name-namely, ixiNyanga (sing., iNyanga), which simply means "skilled-ones," "doctors." The function of the diviners is simply to not as the mouthpiece of the spirits, as intermediaries between the living and the dead. They are, in a manner, mentally abnormal types of humanity, possessing certain occult powers (popularly called simply an iDlozi, or ancestral spirit), which have been, nolens volens, thrust upon them by the spirits themselves; for, as the possession of these powers involves considerable illness and mental and physical discomfort, nobody desires of his own accord to become possessed of them. By these powers the diviners are enabled to get into touch with the spirits, who, feeling the necessity of baving some channel of intercommunication between their world and ours, have chosen these individuals to be their agents or mediums.

AbaNgoma, among the Zulu, are of two kinds. The one, very rare, is said to be possessed of an umLozi or umLozikazana, that is, a speaking (or rather whistling) spirit. In this case the diviner remains perfectly silent, the spirit itself doing the speaking. Europeans are wont to explain this as mere ventriloquism. And such, indeed, it may be; though if it is, it is certainly strange that ventriloquism should remain an idea otherwise absolutely unknown to the ordinary Zulu. Again, ventriloquism would not suffice to explain the phenomenou of the diviner's being able to reveal facts otherwise inaccessible to our normal senses. However, although the writer has seen and heard the performance, he has not been able to discover whether it is really the work of ventriloquism or not. This particular method of divination is practised also by the Luba tribes in the Southern Congo State. Moreover, the diviner there is called by practically the same name (viz., ww.Loshi) as the spirit is among the Zulu, for the umLosi is really the spirit, though its possessor is also commonly named in the same way. But whereas the Zulu spirit speaks from the roof of the hut and in a distinct whistle (also in Zulu umLozi; whence the appellation), rather than a voice, that of the Luba appears to be kept caged within a vessel of some kind and speaks therefrom in a piping voice as though that of a child.

The second variety of wmNgoma is said to be possessed of an iDlazi, that is, simply "a spirit." In this type the spirit is silent, the speaking being done by the diviner under the spirit's inspiration. This species, again, has been "consulted"

with more or less interesting results, by the present writer. Inasmuch as the *iDlozi* type of diviner embraces, perhaps, more than 95 per cent. of the total number of practitioners in this country, the writer proposes to confine himself mainly to a consideration of this species.

The bone-diviner and the diviner by the divining-rod, though both are now fairly common in Natal, are not indigenous to the Zulu tribes. The bone-man is probably an importation from the inland Suto tribes; the rod-diviner from the Tongas.

An um Ngoma may be a man or a woman, a youth or a girl. As a matter of fact, the great majority (fully 90 per cent.) are married women. Further, any individual may become an wa. Ngowa, though never of his own choice; only if called to the office by the spirits, who alone can bestow upon him the occult powers necessary for divination. The chosen individual becomes afflicted with some strange disorder, which proves beyond the knowledge and skill of the Native medicine-man to cure. To the European practitioner, of course, these disorders are generally easily recognisable as forms of nervous disease; though occasionally they turn out to be brain, even kidney or lung, complaints. It is this inability of the Native doctors to cure that suggests the probability that the illness owes its origin to the ancestral spirits. Moved by this suspicion, the patient's relatives forthwith botake themselves for a consultation to an um Ngowa of repute. If the um Ngowa finds that the suspicion is well founded, and that the patient is suffering, not from disease, but from spirit possession, the sufferer is at once removed out of the hands of the medical man and passed over, for initiation, to the care of any selected um Ngoma of power. The initiation process (which may cover anything from a few months to a couple of years) consists mainly in the administration of emetics and other herbal remedies, as well as a course of instruction in the coromonies and functions of the profession. Should the treatment restore the patient's health, such will at once prove that the diagnosis was correct; and so soon as he can prove himself, by practical demonstration, able to divine with tolerable success, the initiation process will be regarded as complete; whereupon he will leave the kranl of his instructor (where he has heretofore been residing) and return to his own home, there to set up as a fully diploma'd umNgoma, holding sittings to all comers at a shilling apiece.

This form of divination is met with among other Bantu tribes; though almost everywhere the Bantu name for such a diviner is not umNgoma or any cognate word, but Nganga, which is akin to the Zulu iNganga, "skilled one," a term also applied by the Zulu to their umNgoma. The root ngoma is isself common enough in Bantuland, but almost everywhere means a "drum"; though sometimes (Kavirendo and Angola) a "dance"; with the Kiknyu "temporary madness"; and with the Nika about Mombasa, a "spirit." But right awny at the extreme end of Bantuland, among the Duala in the Cameroon, we meet with a diviner almost identical with his Zulu confrère in character and method, and called, moreover, Ngambi, which is probably of the same derivation as the Zulu umNgoma.

The popular idea concerning this Native divination business is that it is wholly and knowingly an imposture. But such an absolute and unqualified condemnation is not quite in harmony with the facts. As far as the actors themselves are concerned the whole performance is absolutely bona fide; and, based as it is on their spiritistic beliefs, it is perfectly reasonable and natural. A close and unbinsed study of the matter will suffice to convince any European investigator that, subjectively, the whole business is genuine (that is to say, is devoid of any conscious or intentional fraud); and objectively, that while some of its features are real and inexplicable phenomena, a very great deal is undoubtedly

untrue, and in its consequences extremely harmful and dangerous to the Native community.

The original aim of these divinations, as practised among the Zulus, was, by means of certain abnormal powers of intuition, supposedly possessed by the abaNgoma, to reveal knowledge inaccessible to normal man. But the aim of the modern diviner, if judged by his actual practice, while containing all this, goes a good way beyond it; for in these present days his main object seems to be, by means of a certain cunning device, to reveal to the consulting party his own knowledge or desires. To divine by intuition, then, and to divine by device, these two methods of procedure must be clearly grasped and kept apart, the one from the other.

To divine by intuition is no easy schlevement, and must, at the most, be a very rare occurrence. Notwithstanding that every us Ngowa claims to possess the ability, only a really powerful diviner (as the Natives themselves are well aware) can actually accomplish the feat. This type of divination is exemplified usually in cases of loss or theft of stock, and one constantly hears of instances (sometimes on apparently quite trustworthy evidence) where the missing stock has really been traced and recovered through the agency of one of these diviners, though, it must be added, it is equally true that the reverse is very often the case.

The second, and by far the commonest method of divination, is a very different affair, and may be easily accomplished by any intelligent person, even a European, though quite devoid of any abnormal powers. It is no longer a work of intuition, but one solely of skill, or, rather, of mental cuteoess. This type of divination occurs generally in cases of sickness, which furnish the matter for fully 90 per cent. of all Native consultations. Cases of sickness, where the consultant is already perfectly familiar with all the details and seeks only elucidation or advice, are naturally very different from cases of stock losses, where he is himself quite in the dark and unable to offer any suggestions. Matters of this kind demand of the um Ngoma no troublesome exercise of his powers of intuition, which are not always at hand or easily excitable. Here he simply uses "skill," availing himself of the previous knowledge of the facts already in the possession of the consulting party. The plan he employs is precisely that practised by children in their game of "Hot and Cold," but in the present ease the enquirer becomes the directing party quite unconsciously and unintentionally, and not by word of month, but by a process of clapping the bands, which becomes more, or less, vigorous according as the truth (as he believes it to be) is more, or less, approached. Although they themselves do not know it, the African Natives are a highly emotional people, and their inner feelings exert a very strong and marked influence on their physical members, which influence will operate quite automatically and without any will or intention on the part of the thinker. In cases of sickness, moreover, it is the habit of the Native always to suspect some wm Takati, or evilly-disposed neighbour, against whom his feelings will naturally be intensely aroused. In this state of emotional excitement he appears before the diviner. This latter now starts by a process of guessing or gently feeling his way. He makes a statement, and after each short statement the enquirer claps his hands. If what the diviner says is not in accordance with the facts as known, or believed to be known, to the enquirer, the latter shows it (though quite unintentionally) by a markedly indifferent clap, which the diviner immediately notes. He now alters his statement, and wherever the clapping is vigorous, he concludes that he has hit the nail on the head, and forthwith fixes that statement. Feeling his way in this manner, he follows the trail right to the end. After he has succeeded in nailing down all the facts of the illness, as revealed by the clapping of the consultant, he winds up by explaining that it is the work of some malicious neighbour, or may be of the

amaDlozi (spirits). From this it is clear that, in cases of this kind, the diviner is simply revealing to the enquirer his own previous knowledge or preconceptions, telling him what he already knew, or at any rate thought or wished for. In doing this the diviner is giving him just what he wanted, and here, as in all sound business, the main point is to satisfy the customer. But, however fraudulent the practice may appear to be to us, to the Natives, diviners, and public alike, it is perfectly honest. Skill of this kind is regarded by them, just as much as intuition itself, as being a real manifestation of the "remarkable" powers bestowed by the spirits upon the diviner.

It would be interesting, before closing this reference, to inquire whether the abnormal powers of intuition referred to in connection with the first-mentioned type of diviner (those possessed by an umLozi) are really possible in mankind; and secondly, whether there is any ground for believing that our Native diviners really possess them. Such an inquiry would also take us far beyond the limit of space allotted us. But we may briefly say, firstly, that the great majority of Native diviners being clearly persons of the neurotic type, all psychologists and medical men will concede that persons of this neurotic or hysterical temperament are capable, in their fits of exaltation, of manifesting quite extraordinary powers and of performing mental feats altogether beyond the ability of normal individuals. Secondly, assuming (as everyone will be prepared to do) that a certain amount of intuitive power is innate in every human being, we may readily conclude that, among the primitive races of mankind (including our Kafirs), these powers will probably exist in a strength and degree quite unknown to us, in whom, owing to the greater development of the reasoning faculties, they have become gradually atrophied and lost. Curious experiences that we have personally made in connection with the performances of these Native aba Ngoma, and which would be inexplicable unless attributed to intuition or clairvoyance or some other such occult power; as well as other equally curious instances we have met with in many Natives, of a quite abnormal "sense of direction" (akin to that possessed by certain animals and birds), as also of a certain strange sense of "mutual sympathetic or telepathic feeling" existent between Natives (generally blood-related) distantly separated, and between Natives and the animals, all these things have sufficed to convince the present writer that our supposition is more than probable; that our Natives are really in natural possession, in a greater or less degree, of divers mental attributes which we lack wholly or

The Zulu only sacrifices and prays to the spirits when he wants something. To merely praise, unless it be to thank or to implore (and, much more so, merely to adore), were to him utterly useless and meaningless performances. To placate and supplicate in his own interests; to seek the bestowal of some favour, or the removal of some ill-luck, that is his idea of worship. In cases of marriage, when the grace of offspring is besought by the father for his daughter; in cases of sickness in the family, attributed by the diviners to ancestral displeasure; in cases of death in the kraal of father or grandfather—young men cannot, as a rule, aspire to sacrificial honours, while females, even in life of small importance, as "spirits" are utterly disregarded—such are some of the Zulu sacrifices and prayers. But should it chance to be a matter of national rather than of mere family concern, as, for instance, in the case of a general drought or a war, then the Zulu king will assume the rôle of tribal high-priest and sacrifice to the Greatest-great-ones, the most powerful oNkulunkulus of the clan, who, naturally, will be his own direct ancestors.

The Zulu "temple" is the kraal or cattle-fold (isiBaya). In every well-regulated Zulu kraal, in the hut of the oldest woman or isaLukuri (generally the

mother of the kraal-head), a large ceremonial blanket or iniPulse of cow's-hide or goats'-skins is carefully preserved for use on sacrificial occasions.

With this wrapped round him, like a Roman toga, the sacrificing "priest" majestically stands at the head of the cattle-fold, and the selected beast having been duly slain with exactly a couple of lance-thrusts, he barangues the spirits of his ancestors while the ox is still bellowing. Having called them by all the praise-names (ixiBongo) he can think of, "There," he shouts, "is your meat, ye of the "such-and-such clan" (naming, of course, his own); "take ye and eat, that thereby "this child of ours" (who is sick and whom you are taking from us) "may be "restored to health and to us"—or words of similar import, according as the occasion requires.

The business of skinning the beast is immediately proceeded with, and, when complete, the various joints are carried into the old woman's hut (i.e., that of the mother of the kraal-head), or, if she be dead, into his own, where they are carefully placed in a heap upon the still wet hide, strewn with fresh branches. That is the altar; and the meat-joints are the sacrificial offering upon it. There the latter is left overnight "for the spirits" and untouched. On the morrow the joints are distributed and eaten by members of the family only, the prime quarters being claimed by the "priest" and other more important relatives, while that portion (generally the iNanzi, fourth stomach; the ana Naima, the "trotters," and such like), which nobedy longs for, is allowed to remain, along with the ceremonial cloak, in the old woman's hut, where it is stowed away in some back corner for the sole entertainment of the spirits. Of course, it is duly found there next day, whole and untouched; and the explanation is that the spirits only lick it! A pot of beer is generally placed along side, and with the same result—they only sip it! Both these offerings of meat and beer are technically known as sumBeko (pl. imBeko), i.e., things-set-apart-for.

The abaNgoma fraternity is the only class among the Zulu that daily devote some time to prayer. Throughout the night and at early morn they may frequently be heard loudly praying to the spirits in their huts, or singing the hymns peculiar to their class. Wafted to one out of the stillness of the night, or at the peaceful hour of dawn while the rest of the world is still a-dozing, these songs have a sweetness all their own. The air is always in a plaintive, yet melodious monotone, and the burden of the prayer is for enlightenment in the séances of the approaching day.

Only the seniors concern themselves with these matters. The house-boys and nurse-girls we have around us—who constitute all of the Zulu nation most of us will ever come into contact with or know—take no part in all these pious practices of their race and know nothing of them. They are still more children, and the ancestral spirits are fully mindful of them without either their service or their requests.

A. T. BRYANT.

Mathematics.

Thomas.

Bases of Numeration. By N. W. Thomas.

I recognise the justice of what Mr. Migeod says (Man, 1917, 4) about naveviba; but I sim not convinced that kore may not mean twelve in some areas, nor yet that an importation of the duodecimal system from outside is not more probable than Mr. Migeod's psychological explanation. As I pointed out, I have heard of at least one more duodecimal system on the Bauchi plateau, without, however, obtaining any details.

If this is so, it seems at least as likely that both systems came from outside as that they were independently developed. Before the considerations urged by Mr. Migeod as to the existence of six as a base can have much weight, we

must surely know that numerals on this base are found in the Bauchi area or in tribes that had a common home with the peoples of that area.

Five is the most common base for numbers from six to eight, but we also find three and four. What we want to know is the relative age of these different bases; it is inherently probable that five would make its way, at the expense of either four or three, under the influence of counting on the fingers, of which so far as I know only one system—the straightforward one—is in use from the west as far as the Cross River. This starts with a little finger and changes the finger for each unit added.

Mansfeld has figured (Urwald—dokumente) another system, which is also at Ikom. This uses the index for one and raises a finger for each unit up to four. Hutter (Wanderungen) records the Banyang and Bali system; and Gutmann (Dichten) gives information as to the more distant Wajagga system, but on the whole little attention has been paid to the subject. The following table shows these systems:—

No.	Fingers.							
200.	Tkom.	Banyang.	Bali,	Wajagga,				
1	ı	4	1	1 left.				
2	1,2	3,4 ()	8, 4					
8	2, 8, 4	2, 3, 4	2, 8, 4	1, 2, 3,				
4	1, 2, 8, 4	2, 3 of each hand -	1, 2, 8, 4	1, 2, 3, 4,				
5	Clenched hand	1, 2, 3, 6 and thumb of other hand.	Glenebed hand -	Clepched hand.				
6	2, 3, 4 of each hand (1 held down by thomb).	2, 8, 4 of each hand	2, 3, 4 of each hand	Right thumb in left				
7	1, 2 of right on left palm -	4 right + 3 left -	4 right + 8 left -	3, 4 right.				
8	1, 2, 8, 4 of each hand -	4 right + 4 left .	4 right + 4 left	2, 3, 4 right.				
9	Clench right, and draw from left hand with four fingers extended.	5 right + 4 left -	5 right + 1 left	1, 2, 3, 4 right.				
10	Chap, or put elemented hands together.	Hands crossed with thumbs booked	Clap -	Fists or flat hands.				
11	Clap, and hold I right -							
12	Chap, and hold 1, 2 right -		12.2					
18	Clap, and hold 2, 3, 4 right	07	120 212	(12.22)				
14	Clap, and hold 1, 2, 3, 4 right		7 <u>4.000</u>					
15	Touch chest with 1, 2, 8, 4 right,		_	_				
16	Touch chest with 1, 2, 3, 4 right, and hold 1 right.		_					
17	Do., hold 1, 2 right	10000	3223					
18	Do., hold 2, 3, 4 right			100000				
19	Do., hold 1, 2, 8, 4 right -			La L				
20	Hands on feet, or place index of right to side of left hand and swing before chest.	_						
21	Hands on feet, or place index of right to side of	_	_	_				
90	left hand and hold I right.							
40	Swing I right and clap -	-	-					
100	Swing 1 right twice Hand elenched with thumb		-					
-40	between 2 and 3.			-				

Hutter's statements are not free from ambiguity; for brevity I note his numbers from seven to nine inclusive in terms of the two hands instead of separate fingers.

I append a second table showing where these systems are irreconcilable with a base of five; it must, of course, remain uncertain in some cases on what base three

and four are indicated, but we can infer it from later numbers in these cases. There is no information as to the area over which each system prevails:—

No.	Baso.			27	Base.		
	Ticom.	Banyang.	Bali.	No.	Ikom.	Banyang.	Bali
3	(3)		(3)	6	3	3	3
5	(*)	4	_	8	4	4	4

We see that six and eight are, except in the Wajagga quinary system, in bases of three and four; this agrees with the Edo scheme; and the quaternary base is also found among the Kru and in the bend of the Niger. Until, however, we find some clue to the relative age of the numerals and the system of counting on the fingers, we can hardly discuss the question of whether the system of numerals on the quinary base has replaced a system or systems on another base.

It seems prime facie probable that it has done so, but we cannot exclude the possibility that other bases came in with the use of cowry money; for both at Onitsha and Awka the unit of cowry money next above one is six. Here, again, lack of information prevents us from showing in what areas the base of five is not used.

If it is ever possible to map out the areas occupied by the different oral, digital, and currency systems, it will be interesting to compare them not only with each other but with the bases of the calendar. Webster has recently dealt with the week in West Africa, but without giving any clear picture of the distribution of the different weeks. We find in an area on both sides of the lower Niger, and as far as Dahomey, a four-day week, which is also known at the mouth of the Congo and in East Africa. A five-day area begins went of the Cross River, and may extend to the northern Yoruba (the southern have a four-day week); it is found also in Togoland, and the Ivory Coast hinterland at two points. A six-day week is known in Togoland, at Avikam, and, apparently, over a large part of the French Niger territory, but the data are few.

There can be no doubt that calendar systems have spread either by borrowing or by migration of peoples; in fact, the Edo and Ibo have the same names for the days of the week, though with a change in the order. But it is impossible to guess at present at what contro any given system had its rise, still more to explain how its base came to be chosen. It is equally clear that digital and currency systems have spread in the same way, even if oral systems did not (local diversities within the tribes make local evolution a possible explanation, though we may also appeal to the hypothesis of diverse outside influences). It is clear that more systematic knowledge on all the points noted above is needed before we can attempt to frame hypotheses or attempt to throw light on the use of the duodecimal base for numerals.

N. W. THOMAS.

REVIEWS.

Sociology.

A History of the Family as a Social and Educational Institution.

By 97

Willystine Goodsell, Ph.D. The Macmillan Company. 8s. 6d.

A History of the Family as a Social and Educational Institution, by Dr. Willystine Goodsell, is a concise and carefully written volume on an increasingly

important subject, regarded from the double standpoint which its title implies, and it is brought well down to the most recent (pre-war) period. Allowing for a few troublesome and disfiguring misprints, such as "anti-nuptial" for "anto-nuptial" (page 347), "egosime" for "egoism" (page 499), &c., it can be used with more confidence than most volumes of its kind, inasmuch as its author is so unusual as to have no private axe to grind, no lance to break, apparently, on behalf of any pet theory, but takes up an arguable and "documentable" middle position. It is this degree of moderation-a rare quality in present-day social literature-that constitutes one of the book's chief attractions as well as a strong claim to future utility. Under the new conditions now rapidly, and (one might almost say) palpably materialising, it seems certain that the main body of social institutions under which we live will be substantively recast in the flery crucible of warlike circumstance, and although it is too soon to see clearly into what moulds the glowing metal will be run, there are already signs enough to show that the ultimate product will differ in many unexpected and some surprising respects from the vaticinations of our social prophets. The same fate that has overtaken so many of our pre-war theories of military and naval strategy and equipment can hardly fail to affect the fabric of the political and social organisation out of which those theories were spun. If we accept the statement in the Premier's late speech to the deputation from the Manchester Labour Conference, it is the "after-the-war settlement" that "will direct " the destinies of all classes for generations to come," the settlement which, in his view, is to get us a "really new world," If we regard the utterances of President Wilson, in the speech in which he has just told us that America is "born to serve mankind," or the eloquent words in which General Smuts speaks of the necessity of building "on the bedrock of the Christian moral code" as symptomatic, it should be clear that altruism is consolidating its forces, and is likely to play a greater part than ever before in shaping our social institutions after the close of hostilities. Whether we shall not then still meet with the old wolves masquerading under new sheepskin disguises, is a matter which is likely to be piously doubted by the more phlegmatic, and furiously challenged by the more ardent spirits of the community, but it seems to be certain, in any case, that our antodiluvian (i.e., pre-war) methods of shepherding the flock will have to be revised! In these unprecedented circumstances it would be in all probability a bootless task to do more than touch lightly upon the attractive volume at present under review.

Dr. Goodsell traces the history of the family as an institution in all its vicissitudes from "primitive" times, throughout the flourishing period of the ancient Hebrews," of Greece, and of Rome, down to the "Christianised" family type that prevailed in the Middle Ages, and was succeeded by that of the Renaissance, and by that of the modern (17-18th century) periods. By way of supplement he then discusses current theories of reform.

The book as a whole at first sight suggests a bundle of more or less nearly related essays, worked up from a series of lectures, rather than a connected digest of the subject under review, and it undoubtedly suffers to some extent in thus conveying a sense of incompleteness. It possesses, however, and that too in a high degree, unusual qualities of suterprise, of sturdy independent judgment, of inspiration even, which place it easily in the front line as a handbook for the general reader. Dr. Goodsell's description of the alluringly simple Arcadian life in the self-supporting seventeenth century homesteads of New England must possess an abiding

^{*} It would, indeed, have added vastly to the value of the book had it been possible to include some description of the family life and institutions of the ancient Egyptians and of the ancient Mesopotamians, the more so since Babylonia was the mother country from which the Hebrew race itself traces its ancestry ("Ur of the Chaldeen").

interest and charm for, and must indeed at the same time stimulate the pride of, every true Englishman, presenting, as it does, an atmosphere of self-helpfulness, and consequent solid comfort, such as most home-bred readers can only glosn from the perusal, e.g., of Thackeray's Virginians. Though not exactly a complete study, the book is an extremely useful epitome of general facts bearing on family institutions and relationship; considered as a subject for study, moreover, the curious reader may call from its pages many unexpected sidelights on quaint social customs and institutions which have now for the most part been modified, or have disappeared from our midst. Among examples of such customs may be included that of smock-marriages (page 345), of the punishment of scolds (ibid), of the amazing custom of inflicting the death penalty on disobedient sons in the Puritan States of America (page 353), under a rigid interpretation and adoption of the Mosale Law in Deuteronomy axi., 20-21. In addition we are given the elucidation of the tantalising expression "Scarlet Letter" (page 354), familiar from Hawthorne's haunting romance; and yet again, the origin of "bundling" (page 365), which is properly a custom of Dutch origin, such as well might be expected to survive in the old Dutch colony of "New Amsterdam" (known to us as "New York"). Of yet wider and deeper interest to the general reader are the flashlight rays thrown on such subjects as the origin of the modern wedding veil (page 88), of the wedding cake (ibid), of the shee-throwing after the ceremony (page 191), of the wedding-ring (page 190), indeed of the meaning of the word "wedding" itself (ibid). These references include marriage customs only, and the list could, of course, he extended to other subjects. At the same time, for the more advanced student, and indeed for the serious-minded reader generally, Dr. Goodsell has produced one of the most attractive introductions to the general question of social reform that has yet appeared. One delightful shaft of humourof Parthian nature, belike - the reviewer must confess to have revelled in - the description, to wit, of the study of "Eugenics" as a "somewhat sanguine" science ! Nevertheless, the author's remarks on this subject, as upon the kindred topics of feminism, of free love, and of the various aspects of divorce and marriage reform generally, are a model of temperateness and lucidity, though the theoreties will need re-stating-not through any fault of the book or its author-when the present world-earthquake has completed its colossal task of destruction, of emancipation, perhaps of the exaltation, even-if one may so dare to hope-however perilous, W. W. SKEAT. of humanity.

Indonesia: Linguistics.

Brandstetter: Blagden.

An Introduction to Indonesian Linguistics. By Renward Brandstetter, Ph.D. Translated by C. O. Blagden, M.A., M.R.A.S. Asiatic Society Monographs. Vol. XV. London: Published by the Royal Asiatic Society, 22, Albemarks Street, W. 1916.

The excellence of the work of the eminent Swiss scholar, Renward Brandstetter, has contributed very largely to the establishment of a sound method in the discussion of the problems of Indonesian Linguistics. Though a great deal of thoroughly good work has been done by the Dutch scholars—van der Tuuk, Kern, Adriani, and Jouker—their studies have had a somewhat narrower range than that of Brandstetter, and have dealt mainly with certain specific areas in the vast Indonesian linguistic field. But Brandstetter has selected for discussion the main features of Indonesian philology, and presents these in a series of essays which are models of scientific method and clear reasoning, and form a sound basis for the proper comparative study of the languages.

Four of the most important essays have been selected by Mr. C. O. Blagden,

himself an ardent student of Indonesian linguistics, and are now, by means of an excellent translation, made accessible to English students. Their titles are: 1, "Root and Word in the Indonesian Languages"; 2, "Common Indonesian and Original Indonesian"; 3, "The Indonesian Verb"; 4, "Phonotic Phenomena in "the Indonesian Languages."

In the first, by the examination of related words in single languages and comparison of similar words in different languages, Brandstetter establishes the form of the Indenesian root, and then discusses its characteristics, variation, and meaning, with the derivation of the word-bases. In the second cosmy he deals with the phonetic system and word formations, with special reference to their agreement in various languages. He thus shows a common origin and evolution from a primitive type. The third essay deals with the Indonesian verb in all its aspects as to formation, expression of mood, tense and person, and syntax. Examples are taken from the best texts in twenty-four languages.

The essay on "Phonetic Phenomena" is the longest. It enumerates and describes the sounds of the languages and the phonetic laws which regulate their relationship.

Mr. Blagden is to be congratulated upon a very successful work. The translation is very close to the original, and the author himself has assisted in clearing up doubtful points. Mr. Blagden has added some useful footnotes. The translation cannot fail to be of very great use to the English student, whether of Indonesian languages or of linguistics generally. The Committee for Malay Studies of the Federated Malay States Government is to be commended for having commissioned the translator, and the Boyal Asiatic Society for having sanctioned its inclusion in their valuable series of monographs on Oriental languages and archaeology.

SIDNEY H. RAY

South Africa: Philosophy.

Plaatje.

Sechuana Proverbs, with Literal Translations and their European Equivalents. (Diane Tsa Secoana Le Maele a Sekgooa A a Dumalanang Naco.)

By Solomon T. Plantje. xii + 98 pp. London: Kegan Paul, Trench, Trübner & Co., Ltd. 1916.

This is an interesting and instructive collection of 732 proverbial sayings of the Chuana people. Each proverb is given in Sechuana, with a literal translation and an equivalent saying or sayings in one of the European languages. They form a vivid picture of the wit and wisdom of the Bechuana. Naturally most of the similes are drawn from the grazing ground or the hunting field, but there are not a few which show a closeness of observation and originality of thought quite warranting their comparison with European examples. Some examples may be quoted: "He "charms his fold after the lion has delivered an attack," i.e., "He shuts the stable "door after the horse has been stolen"; "Spotted leopards lick each other," i.e., "Birds of a feather flock together"; "The medicine of a far country is gathered "on the day of the game drive," i.e., "Kill two birds with one stone." Many others show a close parallel with European sayings.

The writer, himself of Beshusaa blood, and the first author of his race, has prefixed to his collection an interesting account (in English and Sechuana) of the history of literary effort among his people. This contains a series of portraits of the pioneers in Sechuana literature, in mission work, in scholarship, in journalism and printing, in law, and in phonetics. The portrait of the author himself is included.

Mr. Plaatje is to be congratulated on the book he has produced. One hopes it is only a sample of the valuable anthropological work which he may publish in the future. A collection of Sechuana folk-lore and traditions, with the sociology of the Bechuana, would be a fitting task for one who has had the patience to collect and collate this unique collection of proverbs.

SIDNEY H. RAY.

Sociology. Webster.

Rest-Days: a Study in Early Law and Morality. By Hutton Webster, 1 Ph.D. New York: The Macmillan Co. 1916. Pp. xvi + 325.

The origin of the Hebrew Sabbath has long been a problem to thoughtful theologians; and the more rationalistic of them have preached that it is due to the need of periodic rest and refreshment from daily toil. Though this account of it by no means satisfied all the questions aroused by the regulations which governed it in the various legislations before and after the Captivity, no other was generally accepted. Until the development of authropological research, however, no more convincing solution was possible. But when it was found, on the one hand, that many other peoples had a reckoning of time which divided it by weeks, some of seven days, others of four, five, or even ten, and sacred days periodically recurring at a greater distance of time, and, on the other hand, that some of the most industrious nations, like the Chinese, had no regular day of rest at all, it became evident that profounder and more extensive enquiries were necessary, and that the problem would have to be solved, if at all, by the comparative method.

To that task Dr. Webster, Professor of Social Authropology in the University of Nebraska, has set himself; and after a preliminary monograph, issued several years ago, he has now given the world the result of his researches. The institution of rest-days is one aspect or branch of the widespread subject of taboo. Professor Webster therefore begins by a sketch of taboo in general, and a discussion of the taboo of time at epochs critical either to the individual or to the community. But the line between rest-days, during which labour, and indeed all other usual incidents of life, are tabooed at critical epochs, and periodically recurring days dedicated to the service of superhuman powers, is not very easy to draw: the one passes over into the other without any obvious gulf between them. If the one may not be said to be derived from the other, at all events they must both have taken their beginning from the same psychological causes. Here, however, two things are found. First, rest-days more or less regular in occurrence, and following at short intervals after periods of continuous labour among comparatively primitive peoples, are in general only observed by those which are given to agriculture. The pastoral nomads, the migratory hunters and fishers, know nothing about them, though they may observe days recurring at greater intervals, such as the full moon, or the annual return of summer or winter, which necessitates a seasonal change of habits. Secondly, "the greater number of periodic rest-days observed by agricultural peoples " in the lower stages of culture are associated with the institution of the market. " Days on which markets regularly take place are not infrequently characterized by " Sabbatarian regulations." Examples are found in both hemispheres, but particularly throughout equatorial Africa; and Dr. Webster examines them with some minuteness. Thence he turns to lunar observances and the seven-days' week-subjects which occupy the remainder of the volume.

While the market-day is, speaking generally and wherever Mohammedan influences have not contaminated the earlier practice, independent of the seven-days' week and the observation of the moon, "among many peoples in both the lower and "the higher culture the time of new moon and full moon, much less commonly of each half-moon, forms a season of restriction and abstinence." This taboo, arising under primitive conditions, is greatly strengthened by the general course of religious

development, the emergence of polytheistic cults, and the schematization of the ritual. The author justly observes that it seems idle to seek a particularistic explanation for it. The moon waxing and waning is held to exert a sympathetic influence on human activities. Moreover, "the new moon, rising as it were from the "dead, is thought to be pregnant with meaning for the life of man." Her conspicuousness in the heavons, her great; and mysterious changes, render her the first of the heavenly bodies to be observed with attention; and the beginnings of a calendar may in many cases be traced to the observation of the moon. The calendar in its turn is inseparably associated with religious ideas and religious practices.

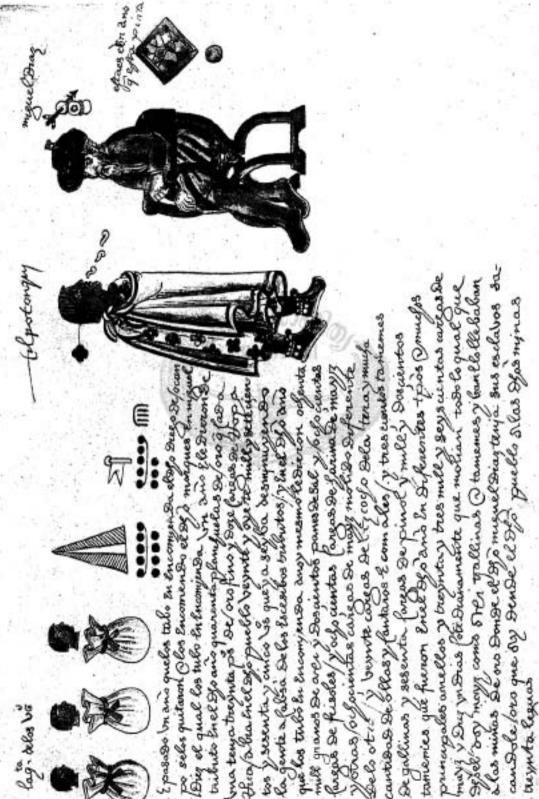
Among the Israelites the term skabbath was originally the designation of the day of the full moon. It came to be applied to every seventh day, and the religious taboos originally affixed to the season of full moon were, many of them, applied to the seventh day. Dr. Webster holds that the Hebrew institution of the Sabbath was not derived either from Egypt or from Babylon, but was a native development from the observance of the full moon. With the dispersion of the Jews, even before the Christian era, it was carried throughout the Roman Empire, and the observance of the seventh day as a day of rest seems to have been borrowed from them by the Greeks and the Romans. With the spread of the worship of Mithra, Christianity's most formidable rival, came a tendency to substitute the first day of the week for the seventh as a day of rest from secular occupation, and of worship. Constantine (A.D. 321) legalised it by an edict requiring magistrates, city people, and artizans to rest "on the venerable day of the sun," though he still permitted agricultural labour on account of its utility and the necessity of taking advantage of the weather. This was a pagan regulation by the empuror as Pontifex Maximus. But when Christianity finally became the State religion, and the pagan days of observance were abolished or became obsolete, Sunday was retained with a new meaning.

This bare outline of Dr. Webster's learned and acute orgument can give no notion of the width of his research and the care with which he has sifted the vast array of his authorities. Doubtless here and there a meticulous examination may detect a slip, as when he speaks of the Arunta making "a male deity" of the moon. These things, however, are trifles, and do not derogate from the accurate scholarship displayed in this masterly treatise.

I have spoken of the origin of rest-days as a problem to be solved, if at all, by the comparative method. And it is by the comparative method that Professor Webster has proceeded. At the same time he is quite aware that there are limitations to the ase of the comparative method alone. The chapters on the Babylonian Evil Days and the Hebrew Sabbath show how wall and sagaciously be is able to employ the historical method. He sums up the difference in the application and value of the two methods thus: "Within contiguous areas, for example, in Borneo " and the adjoining islands, or among related peoples, such as the American and "Asiatic Eskimo, it is reasonable to ascribe the uniformity of custom to long-" continued borrowing. . . . But where the tabooed days are observed for the " same reasons by unrelated peoples, who, as far as our knowledge reaches, have " never been in cultural contact, the student is obliged to conclude that the beliefs " underlying the custom in question have not been narrowly limited, but belong to " the general stock of primitive ideas. In such cases the doctrine of the funda-" mental unity of the human mind seems alone to be capable of explaining the " astonishing similarity of its products at different times and in different parts of " the world." These are the principles that have guided him to his conclusions. E. SIDNEY HARTLAND.



MEMORIAL OF THE INDIANS OF TEPETLACZTOC TO THE KING OF SPAIN.



ORIGINAL ARTICLES.

With Plate K. Mexico.

Hunter.

Memorial of the Indians of Tepetlaoztoc to the King of Spain. By Annie G. Hunter.

This most interesting MS, of the 16th century was amongst Lord Kingsborough's papers at the British Museum, but is not published in his great work on Mexico. The MS, is a complaint addressed by the Indians to the King of Spain against the excessive tribute extorted from them by his representatives in command of the conquered cities of New Spain (Mexico).

Tepetlacetoc is a hill town between Tetecoco and Otumba, in a corner of the valley of Mexico. The accompanying plate" shows a native chief making his protest to the Spanish commandant, Mignel Dias. The fidelity of the portrait of the Spaniard of that period inclines one to feel certain that the representation of

the chief is equally true to reality both in features and costume.

The Spanish writing on the plate tells us how the former large population of

the city had been depleted by hard work and extertions :-

"Forty small plates of gold," being demanded each year, "twelve loads of rich " cloth, eighty thousand grains of pepper, two hundred cakes of salt, eight hundred " loads of beans, eight hundred loads of make flour, eight hundred loads of ground " maize of various kinds, a great quantity of earthen pots (ollas), large wine jars " (cantaros), and plates (comales, flat earthen pans), and many fowl, and much " pinol (an aromatic powder used in making chocolate, now called pinola)."

Besides all this there was a daily service of natives to grind what was required, and to take supplies to the mines where Miguel Diaz had his slaves seking gold.

The page ends pathetically, "These mines, alas! were thirty leagues distant

" from the city."

After the 19th American Congress in London, 1912, Seffor Francesco del Paso y Troncoso, delegate for the Mexican Government, had a phototype reproduction made of the MS., dedicating it to Lord Kingsborough as "Codex Kingsborough."

Senor Francesco del Paso y Troncoso has also given a very good description of it in Proceedings of the 19th International Congress of Americanists in London, 1912, with a picture map of the district.

So far the MS, has only been thus reproduced in black and white.

I am at present engaged in making a coloured facsimile of the MS. for Mr. Churles P. Bowditch, of Boston, one of the governing body of the Peabody Museum.

An account of it will be included in an article I am shortly to contribute to The Archaeologist on the "Latest Additions to the Study of American Antiquities." ANNIE G. HUNTER

Africa, West: Sierra Leone.

Migeod.

A Mende Dance. By F. W. H. Migeod.

The following account of a country dance was dictated to me by a 102 Mende named Joe some time since. The translation is interlined. The story begins with a note of the wishes of the town to possess the things requisite for a certain dance. A committee is detailed to arrange for their manufacture. The craftsman is visited, and he is instructed in the traditional method of making the head-dresses, etc. When they are made the purchasing committee goes to fetch them, and then inquires the price. With this they are dissatisfied, and a reduction is effected.

Eventually, when all the remainder of the costume has been made and all is ready. a day is fixed, and the first dance held. Some of the performances of the dancing image are next described; and, after it has received its name, it remains as a permanent institution of the town.

NDOLEHUMOL-THE DANCER.

Mu tato. Nunga wawaisia ti tei hu, te, a mu ndolel hani gbate, ma ya lolela a kpoko.

We begin. The big men of the town said, let us make a dancing thing so that we may go and dance in the evening.

Ke ti konga gbi tei hu, ti ti lolinga ti wa.

And they called all the young men in the town to come.

Te, a mu ndole hani mia mu gbatema.

They said, we ought to make a dancing thing.

Te, fale, mu ndo a wue.

They said, therefore, we will explain it to you.

Te wa kurua o wa kuruni?

They said, do you agree or do you not agree?

Konga te kurungo le.

The men said, it is agreed.

Te, ke mighe le?

And they said, and when will it be?

Te, a mu li nguru-haga-beleisia gama, ti ingui gbate mue.

They said, let us go to the wood-carvers, they (will) make the head for us.

Te kurungo le. Ke ti ya nguru-hagu-beleisia gama.

They said, it is agreed. And they went to the wood-carvers.

Ti li, te, mu wa wu humo wu gbate mue.

They go. They said, we come (to ask) you to make a Humo? head for us.

Te, a ye lole?

They said, how many?

Te, a ye nani. Te, fore kpakpate, bi toa, keua ndopa' wul na, ndowoi a ye nani ingul yelei ma.

They said, it will be four. They said, make two pairs, you see, (one) like a deer's head, with four horns on one head.

Ipeksi wu gbate kena njahele yongolui na.

The other you make with hippopotamus teeth on it.

Ba nda beka fere, bi nda beka gboma fere.

You will put two this side, you put two again that side.

Bi yama, bi ipekei na fere ba kpate yela a Sowot wai wui felangoi towa-wulit ngi

You return, you make one like a big Sowo mask with a pair of bush-goat's horns woven in.

A ye beka woita, beka woita.

On this side will be six, on the other side six.

Bi yama, bi ipekei gbate kena koli wui na.

You return (= again, or, next), you make the other like a leopard head.

Ba ngongolui la beka nani, bi nda beka nani, ke bi kpoyoa.

You put four teith this side, you put four teeth that side, and you finish,

Ye, nya loko lo ma.

He said, my hand is on it (= I agree).

Yo, a li, lo pu wu wa wa male ngi kpele gboyonga.

He said, go and come in ten days and you will find I have finished all.

Ke ti yama. Ko lo pui i hitia ma. Ke ti wa, ti male ikpelei gboyonga.

And they returned. And on the tenth day they come, they find it was all finished. To, ghe jongo mis ma bi pawala? Ye, navo ngu nani.

They said, how much shall we pay you? He said, four head of money.

Te, Ko! Te, gbotongo le,

They said, Oh! They said, it is too much.

Te, maye.

They said, reduce it.

Ye, ke ngi kpiama ngu yira, i loa ngu sawa.

He said, Well, I am taking off one head, that leaves three head.

Te, mu kurus. Ke ti wa a Mende gule. Ti waila kate⁶ sawa.

They said, we accept it. And they came with Mende cloth. They brought three "hate."

Ke ti fea ngi ye, i kurua. Ke ti wa a humo wui naningo.

And they gave it him, he accepted it. And they brought the four Humo heads.

Ke ti konga lolinga. Ti kpate, ti ndoa tie.

And they called the young men. They prepared (them), they showed (them) to them.

Te, ndole hani gege mue ma gbate lo, tamia ti kpatea.

They said, the dance thing we said we would make, so it is they have made it.

Fale mu ndoa wae. Te, mu kurua.

Therefore we show it you. They said, we accept it.

Te, a mu konde gale mbumbu.

They said, let us take a country cloth.

Te, a mu pu baji¹ hu, mu kpou.

They said, let us put it into "baji" dye and make it yellow.

Te, mu kurua. Te, mu yama, mu nduvui⁸ gbia mu kao,

They said, we agree. They said, let us return and pull off a palm branch and peel it.

Ta be mu pu mbundoi? hu. Ke ti nduvui wunga mbundoi hu.

Next let us put it in eamwood dye. And they put the palm branch into camwood dye.

Ke ti konde gule wunga baji hu, ti kpounga.10

And they put the country cloth into "haji" dye, they made it yellow.

Ke ti humo wui wunga baji hu ti kpou.

And they put the Humo head into "baji" dye, they made it yellow.

Ti pekci wu njalei hu. Ke ti pua njalei hu, ingui fere ti telini.10

They put the other into indigo. They put it into indigo, they dyed the two heads black.

Ingui fere gboma ti kpouni. Ke ti kpoyos.

The other two heads they made red. And they finished.

Te, migbe ma ndole ji lato? Te, lo fere ma ya ndole late.

They said, when shall we begin this dance? They said, we will begin in two days.

Te, mu kurus. Ke ti ya. Ke loi i hitia ma.

They said, we accept it. And they went. And the day came.

Ke ti wa, te, migbe ma lato? Te, a kpoko voloi mia we ma ndole lato.

And they came, they said, when shall we begin? They said, towards evening we will begin the dance.

Te, mu kurua.

They said, we agree.

Ke ti sangbe lauga, ke ti mbili wai langa.

And they tightened up the small drums, and they tightened up the big drum.

Ke ti ya kpiti hu. Ti li, ti kereli yase imbengoi dewe, ngili nani, ke ti wala tei hu.

And they went into the jungle. They go, they cut four bundles of dry palm leaves. and they bring them into the town.

Ke ti kula ngiti wa ya ndoleme.

And they threw them down in the big dancing place.

Ke ti ndole laton. A ndole we, a lola, a de poron.

And they began the dance. It dances, it grows, it rises to a great height.

Ke i yama i kutu. A ndole we, a ndol le.

And it became small again. It dances, it bears children. 12

A yama, a ndole we ngi wninga fere. A yama, a ndole we.

It returns, it dances, it (next) has two heads. It returns, it dances.

Ta ngombui yate, ti njasa mbe wu nga. Ke i gula hu.

They light a fire, they put the dry leaves on it. And it fell inside.

Ngombui a vo, ngi gei e mo.

The fire flures up (but) its covering cannot burn.

Ke i ndole wenga. Ke i kpoyoa. Ke i yama. Ke ti yinga.

And it danced. And it finished. And it returned. And they slept.

Ke ngele wa, te, ngafe¹³ ji gue i ndole weni, ngi biyei?

And next morning they said, this spirit that danced last night, what is its name? Nunga wawa tei hu, te, Ndolehumoi mia.

The big men in the town said, it is Ndolehumo.

Tei gbi, tamia, wa ngi dolela. Te, mu kurua.

All you in the town, therefore, must call him so. They said, we agree.

Ke ina i gboyoa ma a ngi ndei na.

And that is finished as far as that is concerned.

F. W. H. MIGEOD.

NOTES.

The word "dance" is used throughout here, but it does not mean that all the spectators necessarily danced themselves. It refers rather to the antics of the image whose movements are described as dancing. The "o" in edsis (dance), is pronounced nearly like "u."

* Hune-a fatish or medicine personage in the Poro society.

- Maps—an antelope, the Bush-buck of Harnessed Antelope (Tragelaphus scriptus).
- Some-a leading personage in the Sande (also called Bundu) society, which is the great female "secret" society.
- * Tops-well-a small dulker, called in Sterra Leone English the Bush-goat or Filantombs.
- * Kets-a length of cloth up to 48 yards but varying in breadth. The scale of cloth messure is 1 Bs = 2 fathoms; 1 bale = 2 Ba; 1 Kate = 6 bale, but some say 5 bale, others 7 bale.
 - * Baji-I am not sure of the botanical name of this tree.
- * Nduru-a palm (Raphia ciaifera). It has many uses. The long strong fronds are emplayed for roofing. Decomposed in water they produce the plassaba fibre. The leaves are sewn together with small splinters to make mate like tiles for roofing. I do not think that this last use is indigenous, however, but that it was brought from Cameroons and French Congo region by released slaves landed at Sigra Leone in former days. The stem of this palm produces palm wine.

Mbando—the eninwood (Baykia nitida—Loguvinosa).

- ¹⁸ Dark blue is not particularly distinguished from black, nor are yellow, red, and brown from
- " Kere-an inferior date-palm of small size. It grows on the edge of brackish water. This name is, I think, only known to Mende living near tidal water, not to those further up country (Phonia reclinate or spinosa).

" Explanation supplied, "because he puts the heads on his hands and feet," making as it were additional beings.

" Ngafe is the equivalent of the word "devil" which is commonly used in descriptions of African fetish practices. It is also used in "coast" English.

India: Folklore. Hildburgh.

Note on a Magical Curative Practice in Use at Benarcs. By 103 W. L. Hildburgh.

The following practice was described to me at Benares, and as being in use among the Hindus of that city. It was said to be carried out when the patient's sufferings are due to the malignant spirit of a woman who has died in childbirth. Although the natures neither of the patients nor of their malady were specified in the description, we may, I think, from certain well-recognised characteristics of such a spirit, judge that the patients to be treated are either infants or pregnant or parturient women. The various small objects mentioned below as employed in carrying the process into effect were purchased for me by my informant, some at one shop, some at another; their total cost amounted to about one anna.

The performance is preferably carried out on a Sunday, a Tuesday or a Saturday. Into a small paper palanquin, such as is used by children as a toy, are put toy or other representations of the following objects: -(a) A plate, generally red on its upper surface, and asually with silver-coloured streaks; (b) a box, containing two of the anangles used by women for decorating their foreheads; (e) a comb; (d) rolls for placing in the holes in the lobes of the ears; (e) two bangles; (f) two bracelets made of cord; (g) a necklace; and (h) a doll. The palanquin, with the other things in it, is then carried round the patieut's body-or, sometimes, passed round his (or her) head-usually three times or five times, and the afflicting spirit is requested to leave her victim in peace, it being believed (according to my informant) that, presumably pleased with the offerings of the ornaments, &c., for her use which she finds within the palanquin, and with the gift of the vehicle, she will be disposed to transfer her activities from the sufferer. The doll, which my informant stated was for the spirit "to play with," has been, I am inclined to think, probably intended to represent the victim, and to supply the offender with a substitute for the application of her attentions. The palanquin and its contents are finally taken, at night, to a cross-roads, and left at the junction; the person carrying the objects should not be spoken to on his way to the spot, lest the efficacy of the performance be impaired. After the palanquin has been left at the cross-roads, should anyone chance to step upon or over it, the patient will be cured, while (according to my informant) the person who has passed over the palauquin will become ill in the patient's place; and should it happen that no one steps over the palanquin, the patient will probably be only imperfectly relieved, and only in accordance with the charitable inclinations of the afflicting spirit.

I think, basing my judgment on the greater part of the features of the above operation, that my informant was probably in error in stating its underlying conception to be the pleasing of the afflicting spirit to such a degree that she will voluntarily give up her victim. The attempted bribery of a supernatural being to whom a malady is ascribed occurs not infrequently in curative practices among Asiatic peoples, but it occurs generally when the supposed cause of the harm is regarded as being of so powerful a nature that it must be treated with respect, and persuaded, rather than compelled, to leave its victim—small-pox, for example, furnishes many illustrations of treatments based on this idea. To me the present practice appears to embody rather the idea of a spirit-trap, into which the ghost-doubtless looked upon as being, like most ghosts, somewhat stupid-is to be entired, and in which she will find things to amuse her, and, until it is too late for her to return to her victim, make her forget all about the evil work on which she has been engaged. The principal objection to this theory seems to me to lie in the statements-which might conceivably be regarded. as associated with a powerful demon rather than with a comparatively feeble ghostthat, if the palanquin be stepped over, the person stopping over it will contract the

malady, and that if it be not stepped over the malady may recur; but this objection is almost extinguished by the possibility that my informant was erroneously adding a detail properly belonging to some other operation, the probability that the malady is thought to affect only those who are of an age or a sex liable to its attacks, and the conception-a fairly common one in at least other parts of the East-that a thing which is stepped over is weakened, or even rendered powerless. The taking of the objects to the cross-roads at night is, perhaps, to be accounted for by the very practical consideration that, if the palanquiu be deposited during the night, there is more chance of its being stepped over, unnoticed in the darkness, than if it were left during the day-time, as well as by some such general conceptions as that, the evil spirit being one of those most (or entirely) active during hours of darkness, all transactions with her should be carried through during those hours; that, fearing the sunlight, she may refuse to leave her victim's house excepting in darkness; and that at night there is less chance of her being caused, by some random word or action of a passer-by, to leave her vehicle before the cross-rouls has been reached and to return to her victim along the road she has gone over; while the somewhat anti-social character of one of the elements of the operation-the transference of the malady to an unsuspecting stranger-is not improbably accompanied by a fear of reprobation should the bearer of the objects be detected at his task,

W. L. HILDBURGH.

This is an interesting example of the beliefs in Northern India as to the Churël. The following passage from Mr. Crooke's Popular Religion and Folklore of Northern India, Vol. I, pp. 273, 274, is worth reference, as further illustrating the idea of amusing or diverting these malicious spirits. "In the Hills the place "where a pregnant woman died is carefully scraped and the earth removed. The spot is then sown with mustard (sarson), which is also sprinkled along the read "traversed by the corpse on its way to the burial ground. The reason given for this is two-fold. First, the mustard blossoms in the world of the dead, and the sweet smell pleases the spirit and keeps her content, so that she does not long to revisit her earthly home; secondly, the Churël rises from her grave at nightfall and seeks to return to her friends. She sees the minute grains of the mustard scattered abroad and stoops to pick it up, and while so engaged Cock-crow comes; she is unable to visit her home, and must return to her grave. This is another instance of the rule that evil spirits move about only at night."

M. L. D.

Anthropology.

Petrie.

Links of North and South. By W. M. Flinders Petrie, D.C.L., F.R.S. 104

As those who study classical and northern history follow somewhat different lines, it seems desirable to bring together a few connections, however simple they may be, which may help to join the two fields. There is no connected argument in this paper; it is only hod-man work in collecting anthropologic material.

The account of Zemolxis varies. Strabo states that he was a disciple of Pythagoras, afterwards a priest, and then "esteemed as a god, and, having retired into a district of caverns, inaccessible and unfrequented by other men, he there passed his life. . . . The custom continues to our time, for there is always found someone of this character who assists the king in his counsels, and is styled a god by the Getze. This mountain likewise where Zamolxis retired is held sacred "(Strabo, VII., iii., 3). Again, "Prophets received so much honour as to be thought worthy of thrones, because they were supposed to communicate ordinances and precepts from the gods, both during their lifetime and after their death, as, for example, Teiresias. Such were Amphiaraus, Trophonius, Orpheus, and Musseus; "in former times there was Zamolxis, a Pythagorean, who was accounted a god

" among the Gets" (Strabo, XVI, ii, 39). These Getse dwelt south of the Danube, but north of Thrace, in the modern Bulgaria, and were conquered by Darius. "They imagine that they themselves do not die, but that the deceased goes to the "deity Zalmoxis. . . . Every fifth year they despatched one of themselves, taken "by lot, to Zalmoxis, with orders to let him know on each occasion what they "want" (H., iv, 94). Herodotus continues to relate how Zalmoxis was a Pythagorean, and civilised the Thracians, and concludes, "For my own part, I neither "disbelieve, nor entirely believe, the account of this person and the subterranean habitation, but I am of opinion that this Zalmoxis lived many years before Pythagoras, yet, whether Zalmoxis were a man or a native deity among the "Getse, I take my leave of him." Thus we sight Zamolxis as a chthonic deity among the Getse at about 450 s.c., and similarly at about 20 a.c. The variation of the name Zamolxis to Zalmoxis is probably due to assimilating it to Záλμος, à bear's skip.

Remembering that the Getze had probably drifted south from the Baltic, it seems impossible to separate Zamolxis of Thrace from Ziameluks, "a lord or god "of the earth, who was buried in the earth" by the Prussians, and who had a consort, Zamoluksei, "the earth goddess," as described by Prætorius (Deliciæ Prussians, p. 66). For the discussion of other connections and names of this Prussian god, see Chadwick, Origin of the English Nation, p. 247.

To turn to another matter, the stone scated figures holding a cup are very usual in South Russia. This cup, in reality, was doubless of horn, as pottery or glass would not be usual among nomads; and our modern number is the copy of the earlier horn cup still in use. These figures are found from the Daeiper to the Yenesei, placed upon mounds. They are always female, some nude, mostly clothed such as the modern Russian women (Aspelin: Antiquités du Nord finno-ougrien. I. p. 73, Figs. 333, 335; p. 84, Figs. 374, 375. Guthria; Tour through the Taurida, pp. 406-11). William of Malmesbury (p. 189) seems to give the clue to these when he states that the Emperor Henry, 1042 A.D., subdued the Vindelici, "the Vindelici " worship Fortune, and putting her idol in the most eminent situation, they place a " born in her right hand, filled with that beverage, made of honey and water, which " by a Greek term we call hydromel. . . . Wherefore, on the last day of Nevem-" ber, sitting round in a circle, they taste it in common, and if they find the horse " full, they applaud with loud clamours, because in the ensuing year, Plenty, with " her brimming born, will fulfil their wishes in everything; but if it be otherwise, " they lament." This, again, can hardly be separated from the horn of Amalthea, which was borne by Fortune or Tyche.

Further, we may take back this goddess with the horn to the cave-man age. The female figure in relief on limestone rock at Laussel, in the Dordogue, holds out a horn in the right hand. The head has been strangely misunderstood, as a bearded woman without any hair on the head; it is obviously a featureless face looking to the horn, with long hair down to the shoulder. Why an elaborate carving of this kind on rock should be made is easily understood if it was for the honour and propitiation of a goddess of fortune (L'Anthropologie, 1912, p. 129, also in Parkyn, Prohistoric Art, Pt. V). The woman with the horn seems then to be a primitive deity, widely worshipped in Scythia and in Germany down to 1000 A.D., and from northern influence the sources of the Fortuna and cornucopia of classic art.

We are accustomed, owing to disuse, to regard the Maypole as merely a casual feature of a village. But it was much more than that, for we read-

"Happy the age and harmlesse were the dayes When every village did a Maypole raise"

(Pasquil's Palinadia, 1634, quoted by Hone, Every-day Book). The maypole was

repeatedly called the "idol" of the people by the Puritans. As the centre of rustic ceremony it marked the centre of an independent worship. Thus the maypole would constitute a village status, as a church did subsequently. To this view we are drawn by a very remarkable passage in a decree of Pepy II in Egypt, when he constituted a new village as an endowment for the service to his status. The village was to be clear of all claims for service which fell on surrounding villages and property, it was to be an independent community, and on granting it these privileges the king adds, "and my Majesty has ordered to be set up a mast of foreign "wood (fir?) in this new village" (Comp. Rand. Acad. Inser., 1916, 328).

To take now some artistic connections. It is so usual to see plait borders to Roman mosaics that we take for granted such a type. But from Pompeil not a single plait, or even twist, border could I find in all the Naples museum. patterns had not reached Southern Italy in the first century; they came from an outside source. Among the sculptures strewing the Forum of Rome are many from the buildings of Theodoric. There amid all the strongest classical influence, with workmen accustomed to classical designs, under a king who desired above all to maintain classical civilisation, Gothic art was so strong that it was entirely followed, and the decorntion is of the twisted and plaited patterns which characterise the work of the Goths. I have searched almost every church of the pre-Lombard age in Italy, and obtained every photograph accessible of that work; not a single example of the angular plait or interlacing occurs in that age. The rounded or osier plait is universal, from the screens of Sau Clemente to the basket-work capitals of Justinian. The rounded plait or interlacing is the mark of the Goth. the Lombard arrives the angular plait comes in, and soon dominates all Italian decoration. It seems to have been due to using rushes, or a material which would not bend in close curves like the osier.

Why, then, should this style of interlacing work come into use in Roman mosaics of the second century? It was probably due to the quantity of Dacian prisoners of Trajan, and of Marcomanni and Quadi, brought by Aurelius. prisoners could be safely trusted to do mesnic work with but poor tools and little supervision, locked up in a building. Their national taste appears in the borders and subsidiary parts of the decoration. At Woodchester, where there is hardly a trace of osier pattern, the coinage goes back to Hadrian. At Brading, where there is more osier plait, the coinage begins with Gallienus. At Harkstow, where the plait is widest, it is noted that the peaked saddle represented belongs to the Lower Empire (Morgan, Romano-British Mosaic Pavements). The fine pavement from Carthage, with head of Ceres, is certainly early, as other Roman pavements occurred several feet above it; there is no plait, or even a twist, pattern in it. So far as a few references will take us, the plait seems absent from the earlier mosaics, but that is a wide subject for exact research by the specialist in Roman dating. In another line, in Irish ornament, the plait is unknown till after the visits of the Norsemen ; all the earlier decoration is of Bronze Age spirals.

Why, then, should, the plait belong to Gothic work? The explanation appears in a painting by Verestchagin of the interior of a Kirghiz tent. There screens of interwoven sticks are seen to be the necessary part of a nomad's furniture, to hold the tent sides in place against the wind. Anyone who has lived in a tent will appreciate this; and the earliest and finest Gothic interlacing is expressly on the pierced marble screens in churches. The plaited osier is the mark of nomad life; and it is this pattern which belongs to Central Asian civilisation, cropping out in Hittite and in Assyrian decoration.

A similar case of the influence of captive eraftsmen is seen in the pottery lamps. It is accepted that the OC ornament on the spouts is unknown before the

time of Casar. That ornament is late Celtic, and it was, therefore, brought in to Roman pottery by the Celtic prisoners from Casar's campaigns, who could be safely

turned on to pot-making.

Lastly, let us look at a question of mythology. The Nibelungeniled is so familiar in its German dress that it is credited too often as a German production. It is agreed, however, that the Icelandic version gives an earlier and finer form of is. I shall here quote from the translation of Magnússon and Morris, but shall not attempt to analyse it, only to suggest an element in its formation. the mainspring of the whole work. The purpose of sinking the golden treasure in the Rhine is to prevent the Huns having it (p. 231, ed. Scott). The Volsungs were kings over Hunland (p. 5), Sigmund was king of the Huns (p. 36), Sigurd his son likewise (pp. 124, 179, 195); Budli was a Hun king, Atli-the great Attila -was his son, and Brynhild his daughter (pp. 97, 121). In the song of Atli are many statements of his being king of the Huns (p. 227). All this may be well known, but the obvious conclusion that the Brynhild story is a Hun folk legend seems hardly realised. This does not refer to the Teutonic Hunaland, as Attila is a main figure. It has been too often assumed that the Huns were mere savages. Yet the description of the magnificent wooden palace of Attila, like the great wooden buildings of Japan-the rich embroiderics worked there, the trappings mounted with gold and jewels, the wife of Attila in her palace receiving the Roman embassy, and the precise ceremonics of the court-all show that, however distasteful the Hun was, he had a civilisation fully developed to his manner of life.

Now, what are the obviously mythologic elements linked up with the traditional Attila? His sister Brynhild is a war delty: "She fared with helm and byrny unto the war" (p. 80); "for ever will she hold to warfare" (p. 83); "She answered "in heavy mood from her seat, whereas she sat like unto a swan on billow, having "a sword in her hand and a helm on her head, and being clad in a byrny" (p. 96). She is wrathful: "Go see her and wet if her fury may not be abated" (p. 105); "Ah, to these will I tell of my wrath" (p. 105); "from the eyes of "Brynhild Budli's daughter flashed out fire, and she snorted forth venom" (p. 121). She strove to kill her lover, Sigurd, who had allowed Gunnar to supplant him

(p. 97). Lastly, there is the grand poem of the Hell-ride of Brynhild :

"And so folk say that Brynhild drove in her chariot down along the way to hell, and passed by the abode where dwelt a certain giantess, and the giantess spake :-

"Nay, with my good-will Never goest thou Through this stone-pillared Stead of mine. More seemly for thee To sit sewing the cloth, Than to go look on The love of another."

This giantess is, therefore, the doorkeeper of hell, with whom passes the

colloquy with Brynhild.

Here, then, appears a maiden warrior, devoted to war, fierce and wrathful, yet pivoted in her love to the lover whom she slays, finally descending into hell, challenged by the gate-keeper. Every one of these characteristics is equally true of Ishtar.

Ishtar is figured with bow and arrows, standing crowned; she holds the captives by a cord; she has spears or arrows radiating from her: "She was conceived of as " a virgin, or at all events, a goddess who might indulge in amours so long as they " did not lead to regular marriage" (Sayce, Religions of Egypt and Babylonica,

p. 340); a parallel position to Brynhild with Aslaug, her daughter by Sigurd (Volsunga Saga, p. 97). Ishtar loved Gilgames, but he taunts her with the miserable end of all who had loved her in the past, so she demands from her father vengeance on Gilgames (Sayce, p. 434). Ishtar retained her independent personality with as much tenacity as the gods (Sayee, p. 332). Ishtar belonged to the non-Semitic population (Sayes, p. 337). Lastly, Ishtar is, perhaps, best known by the legend of her descent into Hades, and the challenges of the successive gate-keepers.

The position seems to be that a warrior goddess, with lovers but never married, who forced her way into hell, was an idea of a Central Asian people; that this was transformed into Ishtar by the peoples who pressed down in pre-historic days into Babylonis; that it was carried in some form westward by the Huns, and transformed into Brynhild by the Norse ethics and customs; and it was finally treated by

the Germans much as Malory treated the Arthurian legends.

Such are a few of the dim links between North and South which may some day serve to join up the two great streams of ancient history.

W. M. FLINDERS PETRIE.

New Zealand: Ethnography.

Skinner.

The Maori Hel-tiki. By H. Devenish Shinner.

In a paper which appeared in the Journal of the Royal Anthropological 105 Institute, Vol. XLVI, p. 309, I endeavoured to throw light on the problem of the origin of the Maori pendant called "Hei-tiki." In the course of the paper I made the following statement: "Karl von den Steinen . . . has reached a conclusion " arrived at independently by the present writer. This conclusion is that the dis-" proportionate size of the head, the slant at which it is set, and the curved legs " depend not on a realistic representation of the human embryo, but on the proportions " of the greenstone adze."

Mr. Henry Balfour has written to me that General Pitt Rivers recognised some 50 years ago the influence of the adze on the form of the typical hei-tiki, and has asked me to give Pitt Rivers priority in this regard. This I am only too glad to do. Pitt Rivers' statement has not been published in any of his papers, but occurs on his original printed label attached to a specimen in his collection. It runs as follows: "Tiki, New Zealand. The form of these images, always sharp " towards the feet of the image, suggests the idea that, like some Carib axes, they " may originally have been derived from celts, ornamented with a human figure." Mr. Balfour adds: "The specimen in greenstone has a well-defined, sharp cutting-" edge. When I was arranging the tikis in the museum some 25 years ago, I " placed two more alongside of the one referred to, in order to show the eventual " loss of the cutting edge, through its interruption by projections concerned with " the feet. My idea was that the adze-blade itself was probably symbolic (as in " Mangaia, &c.), and that an anthropomorphic design was grafted upon it, possibly " to increase the symbolism. The net result being that the adge ceased to be " functional and became the vehicle of the anthropomorph. I quite agree with you "that . . . there were hei-tiki before celtiform examples. The hei-tiki already " existed in other forms, but the idea seems to have been grafted on the adze, " whose essential form reacted upon the design and created the distortion of the

Since writing the paper on hei-tiki fresh material and further consideration have somewhat modified the conclusions there stated. Mr. Best states: "The " hei-tiki, it is believed, represented the human foctus, and was supposed to " possess an inherent fructifying influence when worn by women. This statement " has been made by several natives, also by Colonel Gudgeon, Captain G. Mair, and

" Mr. T. E. Green, all good authorities on matters connected with the Maoris." Such an array of authority is decisive, and disposes of the doubts on this point expressed in the paper. At the same time it does not invalidate the evidence there adduced as to origin.

Since the publication of the paper I have received from the Bernice Paushi Bishop Mussum a photograph of a headless anthropomorphic pendant in bone from Chatham Island. This is closely allied to the greenstone forms figured and has a very important bearing on the problem of the age of this type of pendant.

Finally, fresh evidence indicates clearly that the ribs shown on some hei-tiki have no original connection with the forked tongue, but are independent and perhaps relatively more ancient. H. DEVENISH SKINNER.

REVIEWS.

Babylonia and Assyria: Folklore.

Spence.

Myths and Legends of Babylonia and Assyria. By Lewis Spence. 412 pp., 41 Illustrations. 8s. 6d. Harrap. 1916.

This work is of a type different from any that have yet touched on Babylonia. The author has written works on the mythologies of Mexico, North America, Egypt, the Rhine, and Brittany. It is obvious, therefore, that he writes as a compiler whose wide view gives a value to what must be dependent on the original research of others. As a whole the book is well organised, the authorities quoted are generally trustworthy, and, with a keen sense of what will be of general interest, there is but little playing to the public. An excellent feature is a descriptive index of thirty pages, serving as a general glossary. Such a work will certainly fill a gap in current literature, and introduce many ideas and comparisons where they have not been There are 26 good illustrations, a few telerable fancy pictures, and a set of coloured travesties, which should be at once removed from the book to prevent misunderstandings. Without the latter pictures, we hope this will be widely read.

W. M. F. P.

Hunt.

India: Archæology.

Hyderabad Cairns. By E. H. Hunt, M.A.

We have received Part 2, 1916, of the Journal of the Hyderabad 107 Archaelogical Society. It contains much valuable and well illustrated matter, but that which will most interest anthropologists is an account of cairus which have been explored at Raigir, Dornakal, Balanagar, and Maula Ali. These are but a sample, taken as it were by chance out of groups varying in number from a few to many hundreds, which are, however, only found on "muram" soil, "muram" being the main disintegration product of granite. The sides of the tombs consist of granite slabs, from 6 feet to 10 feet long, and 5 feet to 6 feet high, the end stones fit in between the side stones, and that to the north is the tallest, projecting well above the side stones; the top is covered with slabs to form the roof, and under all is the floor stone. The side stones are not vertical, but incline towards each other, leaning against the wedge-shaped head and foot stones; these also incline slightly toward each other, being kept apart by the roof stones. The greater the outside pressure the greater the stability; the design admits of no improvement, The cists are set in pits in the ground and are covered with a heap of stones and rubble surrounded by a circle of stones, rather of a boulder than a pillar shape; the diameters of the circles hitherto noted vary from 11 feet to 42 feet, the number of stones varies from thirteen to forty, but twenty-four is a common number; in some circles the stones are small, while in others none would weigh less than a ton, some have large central stones, the largest of which cannot weigh much less than 25 tons. Many of the circles have been broken up by "waddars," and are entirely demolished. Pots and iron sickles have been found in the "muram" filling, surrounding the cists, which is very hard. Rounded red pots with lids, black dishes without lids, and finely glazed vessels of other shapes are found in the cists, some of these have marks upon them which may have some meaning; a copper cup, a copper ferrule, several iron daggers with fluted handles, and numerous iron implements have also been found. The bones discovered are very fragmentary, but seem to have been those of people about 5½ feet high. There are no legends connected with the cairns. The Society (which was founded in 1915 by the late Sir A. F. Pinhey) intends to investigate as many of the cairns as possible, and with particular regard to the position of the bodies and the orientation of the cists. It may be congratulated both on its work and on the journal in which that work is recorded.

A. L. L.

Archæology.

Minns.

Scythians and Greeks: A Survey of Ancient History and Archwology on 108
the North Coast of the Eurine from the Danubs to the Caucasus. By Ellis 108
H. Minns, Cambridge University Press, 1913.

The scope of this most scholarly and comprehensive volume is explained by the author in the first words of his preface, namely, that it is "a summary of what is "known as to the archeology, ethnology, and history of the region between the "Carpathians and the Caucasus." This programme is a very wide one, and will no doubt attract the classical scholar, who is more and more anxious to have an ethnological interpretation of Herodotus and other classical writings; it will attract the archeologist, who is also growing impatient to know to whom the South Russian burial and other remains belong; and above all it will attract the ethnologist, who can scarcely study the present inhabitants of the steppes of Southern Russia without the assistance of history and archeology. Thus it is the student of historical ethnology who will be most grateful to Mr. Minns for his labour, and it is from this point of view that we propose to deal with the book. We have the more right to do so, seeing that an appreciation of it from the archeological standpoint, by Sir Hercules Read, has already appeared in Max, 1917, 1.

It was the bronze and other antiquities of Siberia that formed the subject of Sir Hercules' notice, though this region was of secondary importance in the author's scheme. Mr. Minns tells us in his preface "the unity of the "Asiatic and European steppes has led me on occasion right across to Siberia, "Turkestan, and China without any feeling that I was trespassing beyond my borders" (p. vii).

From the point of view of a student of ethnology this decision of the author cannot be considered a very happy one. What we need most of all now is to clear up some of the old errors confusing the peoples and tribes who have at various times inhabited the steppes of the present Southern Russia, and this can only be accomplished by a series of monographic works, each limited to one race or at least to one political unit, and restricted in time and in region. Thus, to deal with the peoples in the vast region stretching from the Carpathian Mountains to the Orkhon Valley in Northern Mongolia, during the long period from the time of the Chinese dynasties, T'ang and Yü (2356-2208 s.c.) to the accounts of our modern travellers, is a task almost too dangerous to face. No doubt such are the limits necessary for tracing and defining the Scythians, and yet it is precisely owing to this method of dealing with the Scythians en bloc that their racial composition cannot as yet be defined. We regret that a writer of Mr. Minns' classical training, knowledge of

languages, and wonderful intuition in finding sources of information, did not limit himself in time and space for the benefit of students. It is, of course, only a question of the structure of the book, not of the contents, because even the very hasty and disproportionate chapter (Chapter VII, pp. 130-149, "Pre-Scythic Remains" in South Russia"), dealing with the Palseolithic Age in Russia, is very correct, though not complete.

The same may be said about Chapter IX, "Siberia and Other Countries "adjacent to Scythia" (pp. 241-261). The subject of Siberian antiquities in general, and the ancient culture of Minusinsk in particular, has only just begun to be worked out adequately, and hence any comparison must stand over till the various types of the different Siberian cultures are better defined, though the author is perfectly justified in going to Siberia for the purpose of tracing the influence of Greek art.

On the whole, however, the similarity between the Siberian and South Russian steppes does not imply the identity of their archeology and ethnology. (See Man, 1917, S6).

For a more ethnological interpretation of Siberian archeology than that given by Mr. Minns, the student might well turn to Unknown Mongolia, by Douglas Carrethers (pp. 48-72), a work published in the same year as Mr. Minns' book, though the latter was obviously written some years earlier. But it must be remembered that Mr. Carruthers' conclusions on questions still open to discussion (e.g., Who are the Uriankhai people?) are inclined to be more hasty than any of those which can be imputed to the author of Scythians and Greeks.

The fact that two British writers on areas as different as Southern Russia and Mongolia, cannot avoid referring to Siberian antiquities, seems to point to the need for a large monograph in the English language, giving a full account of all that is known of the archeological remains of this region. This would be a useful supplement to the extensive literature in English which centres round the work of Sir Aurel Stein.

Passing now to the main object of the book, we find a very full and vivid exposition of the Scythlan problem, and of the geography and ethnography of the Scythians as described by ancient authors, especially Herodotus, and as found in the "Scythic" remains of Southern Russia. Mr. Minns' intimate knowledge of Russian archeological literature has enabled him to treat the latter point very fully.

There is also a chapter on the tribes adjoining Scythia, and a short summary of the old Chinese descriptions of their north-western neighbours. The author draws a parallel between this information derived from the ancients, and that given by medieval travellers, such as Marco Polo. It would, of course, have been most profitable if he had made more use of the modern Russian monographs on separate North Asiatic races, which the old authors confuse under the name of North Asiatic Nomads, or Mongol-Tartars. He might then have altered his opinion that "Turkish comes to "the same thing as Mongolian" (p. 48).

One sentence in particular shows very clearly the fine anthropo-geographical spirit of the author: "The characteristic dress of the Scyths which struck the "Greeks so much, is almost the only possible one for a nation of riders living in a cold climate; so, too, the use of various preparations of mare's milk, butter, kurnys and cheese, the felt tents, hows and arrows, curious methods of cooking, owing to the absence of proper fuel, were conditioned by their general mode of "life, and could be nearly paralleled among any nomad tribe" (pp. 47-48). How many different authors have taken all these characteristics as peculiar to the nomad Scythians and the Mongols?

Of all the departments of Ethnology, it is that of art and technology that has the fullest exposition in Mr. Minns' book, in the sections dealing with Scythian art and the influence of Greek art upon it. The transliteration of Russian is most fortunate, and the author must be congratulated on this point, for the method of transliteration used in Euglish scientific literature is apt to be defective and confusing, too often representing Slavonic words according to a German system.

Congratulations must also be offered him on the score of the maps, plans, and illustrations, all of which, like the text of the book, impress the reader with their

correctness,

The bibliography is full and well chosen. It, is to be regretted that Professor Restortsev's monumental volume on the antiquities of Southern Russia, based on new excavations, came out only in 1914, too late to have been used by Mr. Minns.

Mr. Minns disagrees with K. Neumann's Mongolian theory, as well as with Müllenhoff's Iranian theory, of the origin of the Scyths, and points to Southern Siberia, saying "until the affinities of that civilisation and of the tribes that were "influenced by it have been cleared up, the final word cannot be said on the "position of the Scythians" (p. 97). We might go further and say that we cannot define the position of the Slavs, the Finns, and indeed of most of the European peoples, until the task indicated by Mr. Minns is accomplished.

M. A. CZAPLICKA.

Ecuador: Anthropology.

Jijón y Caamaño.

Contribución al Conocimiento de los Aborigenes de la Provincia de Imbabura 109 en la República del Ecuador. Por J. Jijón y Canmaño. (Estudios de 109 Prehistorica Americana II.). Madrid, 1916.

The investigations described by the author in this elaborate monograph were carried out in the years 1909-1911. He estimates from the measurements of bones obtained from prehistoric burials that the stature of the ancient inhabitants of the province of Imbabura was about 1,620 mm. for men and 1,510 mm. for women, being thus considerably taller than the modern inhabitants of the province, whom he found to have a stature of 1,530 mm, for males and 1,410 mm, for females. He found that the tibia was 86 8 per cent, of the femoral length in ancient males and 83.9 per cent, in ancient females. The tibize were flattened, having an index varying from 63 to 75. He obtained from the telas exervated only a small series of skullsthree of males, three of females, and four of children, all of which had been artificially deformed. The male skulls had a maximum length of 169 mm., a maximum width of 138 mm., and an auricular height of 126 mm. Their faces were of moderate width, the bizygomatic diameter being 130 mm., and of moderate length, the nasio-alveolar length being 70 mm. The noses were relatively wide, 29 mm. The nasal height was 52 mm. The three male skulls, on which these measurements are based, were found in tolas; another limited series was obtained from well-like graves, but there is no essential difference between the people who buried in mounds and the people who buried in the well-like graves. The author describes his observations at great length and gives, numerous excellent plates to illustrate his discoveries, both of the bones and of the figures and pottery found in the graves. A. K.

Secret Societies.

Newland.

Sierra Leone: Its People, Products, and Secret Societies. By H. O. 110 Newland. Pp. xviii, 251. London: John Bale. 1916. Price 7s, 6d. net.

The author of this work appears to have spent four or five months in Sierra Leone, and wrote this book, as he informs us in the preface, for no particular purpose. Despite a somewhat pretentious title, criticism might be disarmed by this avowal, were it not followed by this statement, that "as historian and sociologist, I " have naturally given particular attention to the ethnology, customs, and pursuits of the people."

Occasionally we find fairly detailed information, e.g., on circumcision, which the author describes after witnessing the rite; but as a rule the author's information is incomplete, and he omits to state where particular customs are practised, apparently under the belief that local variations do not exist.

As an example of his method, or lack of it, we may take his chapter on Secret Societies. Eleven pages is little enough to devote to a subject proclaimed on the title page as one of the features of the book, and of these eleven pages three are devoted to general reflections of little or no value. Of the remainder some twenty lines is devoted to the Kofung Society, information as to which is readily gathered, and we are told that it is found among the Limba and Koranko and "some western tribes"; the Timne, who lie south of the Limba, have it; but the Susu, who are the only other "western" tribe, have not, so far as I know.

In addition to Bundu, Yassi, and the Leopard Societies, the author describes Pero, and claims to have inquired into it with some fullness. He has little or no information unpublished by Alldridge, and he does not realise that not only are there differences between Timne, Mendi, and Bulom Pero, but also even from chiefdom to chiefdom within the tribe. He confuses Simo, the Susu Society, with Pero, which he classifies under three main divisions, "religious or mystical, civil or exemplary, and "Semu, apparently confined to the Susus and some of the Tennes, which is better imagined than classified" (!) This cryptic utterance is left unexplained. On page 75 the author informs us that he obtained the facts about Pero from a Timne; the facts given in the chapter, however, relate to the Mendi Pero; further comment is needless.

N. W. THOMAS.

America: Indian Records.

Wraxall.

An Abridgment of the Indian Affairs. By Peter Wraxall, (Harvard Historical Studies.) Edited by C. H. McIlwain, Cambridge, U.S.A. 1915.

This work contains Wraxall's Abridgment of the New York Indian Records, written in 1754, and now edited, with a historical introduction by Dr. McIlwain. The introduction deals mainly with the early fur trade and with the dealings between the Colonists and the Indian tribes previous to 1751. This is a valuable document for the history of the American colonies, and no doubt items of anthropological interest might be found in the record. Its interest is, however, almost purely historical.

M. LONGWORTH DAMES.

Africa, South: Linguistics.

Stirke: Thomas.

A Comparative Vocabulary of Sikololo-Silui-Simbunda. By D. E. C. Stirke, Native Commissioner, Nalolo, Barotseland, and A. W. Thomas, Acting Head Master, Barotse National School. London: John Bale, Sons, and Danielsson, Ltd., 83-91, Great Titchfield Street, Oxford Street, W. 1916. 40 pp.

In this little book of forty pages Messrs. Stirke and Thomas have provided some useful material for the student of the tangled languages of the Barotseland corner of Northern Rhodesia. Of the three here given, the Si-kololo represents the current speech of Barotseland, a corrupted form of the language of the Ma-kololo tribe of Ba-suto, who overran the country from the south and imposed their language on the inhabitants. The original population was the A-lui, whose name, corrupted by the Ma-kololo into A-lozi or Ba-rozi, was the origin of the term Ba-rotse, given by the first missionaries. Thus the Si-lui vocabulary here given may be taken to represent the original but now almost extinct language of the Ba-rotse people. The Si-mbunda represents the language of the most important western people absorbed by the Ba-rotse, the Ba-mbunda in the south-eastern corner of Portuguese West

Africa. The sounds of their language are described as difficult, and hence the orthography is only approximate.

In an introduction the relations of the three tribes are discussed, and the vocabularies are arranged under the English, words. It would have been advantageous to have included the numerals, and to have given some indication of the sounds of the letters.

The authors hope to follow up this vocabulary with similar lists showing the languages of other tribes of the region who are more or less subject to the Ba-rotse.

The book is a useful contribution to Bantu Philology. SIDNEY H. RAY.

Australia: Anthropology.

Berry: Robertson.

Dioptographic Tracings in Three Norms of Ninety Australian Aboriginal Crania. By Professor R. J. Berry and Dr. A. W. D. Robertson, in the Transactions of the Royal Society of Victoria, Vol. VI, 1914.

This work, though it should be brought to every anthropologist's notice, does

not lend itself to a critical review.

It is a most valuable collection of life-size tracings of Australian erania,

admirably reproduced, and got up in the best possible way.

With only six exceptions, they were taken from natives in the Murray River region, and I notice and sympathise with the authors' decision to refrain from sexing the skulls. The only point I would make is that, as they probably have more experience than anyone else, a tentative expression of their opinion on this subject would have been valuable.

I exmestly hope that this will not be the last series of the kind, and that other physical anthropologists, having like opportunities, will adopt the same methods, and

give us accurate dioptographic views instead of sketches or photographs.

One word of warning may not be amiss to those intending to use full face dioptographic tracings; it is that, though the tracing gives the actual height of the orbit, it does not give the actual width, but 2 or 3 millimetres less. One cannot, therefore, use these tracings for determining orbital indices, and it might save trouble if a short caution accompanied future publications of the kind.

F. G. PARSONS.

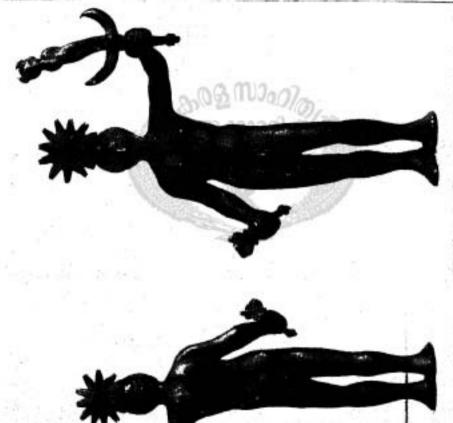
ANTHROPOLOGICAL NOTE.

Pinhey Memorial Medal.

The Hyderabad Archaelogical Society, on the 21st April, 1916, decided 114 that a gold medal be instituted to commemorate the memory of Sir Alexander Pinhey, K.C.S.I., C.I.E., the founder and first president of the society.

Regulations.—(1) The "Pinhey Memorial Gold Medal" shall be awarded triennially for the best work on Decean Archeology or History, in accordance with the subjoined conditions. (2) The competition shall be open to scholars in any part of the world. (3) Competitors shall submit a thesis on any subject chosen by themselves relating to Decean Archieology or History. The thesis should be an unpublished work, or, if published, it should not have been published more than two years before its submission for the Pinhey medal. (4) Theses for the first competition will be received up to the end of October 1918, and subsequently in the October of every third year, i.e., in October 1921, 1924, and so on. (5) If the selected thesis is an unpublished work, the Society, at the recommendation of the Council, shall have the right to publish it in the Society's Journal. (6) If in the opinion of the Council none of the theses submitted in any year are of special value, the medal shall not be awarded in that year. (7) If thesis is written in any language other than English, the competitor shall furnish an English translation thereof.





ORIGINAL ARTICLES.

Archæology.

With Plate L.

Peake.

Antique Bronze Figure from Silchester. By Harold Peake.

The little figure shown in the plate has recently been acquired by the authorities of the Borough of Newbury Museum from the collection of Mr. Joshus Brooke, of Marlborough. It is said to have been found at Silehester, and has all the appearance of being contemporary with the Romano-British town of Calleva.

It is of dark brouse, in an excellent state of preservation, and is 12 cm. in height. It represents a male deity or lar, standing erect, with the bead surmounted by a sun with twelve rays. The right hand holds three ears of some grain, probably wheat, while the left, which is raised to the level of the shoulder, but with the elbow flexed, is bearing what seems to be a crescent moon attached to a handle.

Standing in the centre of the crescent is a small figure with two faces, the head surmounted by what appear to be a pair of short horns. On the front side the figure, which is male, has the right arm bent, with the hand on the chin, while the left arm is behind. On the other side there are two arms, hanging down, with the hands clasped below the waist; the sex of this rear aspect is doubtful, but seems also to be male.

HAROLD PEAKE.

Finland: Magic Ritual.

Bonser.

Some Notes on the Magic of the Finns. By Wilfrid Bonesr.

The religion of the Finns as portrayed in the Kalevala shows a transition state between nature worship and medisaval Christianity, which was introduced by the conquering Swades in the twelfth contrary. The older religion that displayed was

conquering Swedes in the twelfth century. The older religion thus displaced was Shamanism, the Finns' belief in which dated back to the time when they were still an Asiatic tribe in the steppe between the Altai and the Urals. This was a belief in sorcery; magic is its very essence, and spells are its liturgy. Many of the spells have been collected by Lönnrot in the Loitsu-runoja, but the Kalevala itself, though composed in Christian times, is the greatest written monument of Shamanism.

The Finnish Shaman was supposed to derive his power from the supreme god, Jumala, whence the Creator himself is called the greatest sorcerer.* The recital of spells is often followed by prayers to Jumala or other deities, in case the spells alone should not be efficient.

Among the "origins" given in the Loitsu-runoja is that of the wizard. It says that he was born and bred in Lapland, "upon a bed of pine-boughs, upon a pillow "made of stone." It is noticeable that while the Finns attribute great magical powers to the Laplanders, the Esthonians do the same with the Finns; it is, however, necessary in a Finnish epic that the magic of individual Finnish beroes should eventually triumph over that of Lapland. Similarly in the Kalevipoeg the magic of the Esthonian hero conquers that of the Finnish sorcerer.

A recent writer remarks, speaking of the Lapps, that "when anyone was to "enter the ranks of the Shamans he was baptized." It would seem from the Kalevala and the Magic Songs as if the Finnish sorcerers also were a fraternity into which one had to be initiated by baptism. In the Magic Songs occurs the passage, "My mother washed me naked on a nether stone, three times upon a summer night, "to become a wizard . . . a singer . . . a good performer when abroad."†

A similar passage occurs in the Kalevala, in the mouth of Lemminkainen:

"My devoted mother washed me, When a frail and tender baby, Three times in the nights of summer,

^{*} Rune iii, line 201 (Kirby).

Nine times in the nights of autumn, That upon my journeys northward, I might sing the ancient wisdom, Thus protect myself from danger."*

For the successful performance of their magic rites, three things appear to have been most important to the soreseres: night, nudity, and the neighbourhood of rocks and stones. All three occur in the above quotation, and they are mentioned in many other passages in the Kalevala. A folk-song says that the Lapp singer and magician, having seated himself on a rock, takes off his cont and turns it inside out so as to increase his powers. In summer time it appears to have been the practice to take off all the clothes so as to increase the magic still more. Lemminkainen boastingly tells† how three Lapland wizards by their spells tried to sink him in a swamp one summer night. They stood together naked on a rock to enchant him, but his own magic proved too strong for them. It was to this same fate that Vainamoinen by his magic songs doomed Youkahainen.‡ In order to release him, he sat down "on the stone of song," and three times sang his words of magic backwards, thus dissolving the spell.

Similarly, when Vainamoinen sings his harp-songs, which overpower all who hear, in order that the magic may be greater, he first-

"Lays his finger-tips in order, White and white his thumbs he washes, Gets him on the Rock of Gladness, Stands upon the Stone of Singing."

And yet again in the case of the second harp, before playing upon it-

" Vainamoinen

On a rock his seat selected."

The Sampo is, of all things in the Kalevala, the most desentially magical. Ilmarinen searched for three days for the place in which to make it—

"And at length, upon the third day, Found a stone all streaked with colours," And a mighty rock beside it."

He is at once satisfied, and proceeds to erect his smithy. His servants work the bellows-

"During three days of the summer, During three nights of the summer, Stones beneath their beels were resting, And upon their toes were boulders,"***

The last two lines are most curious and unexpected; one, therefore, the more readily suspects some reason for their inclusion in the rune.

It appears from the Kalevala that women in Finland shared a knowledge of Shamanic wisdom, since it is Lemminkainen's mother who initiates him into Shamanic rites. And, although from Scheffer's account in 1673 it would seem that Lapp women were excluded from participation in certain of the Shamanic esremonies, from the evidence of the Kalevala they appear to have been very powerful in magic there also, for Louhi is styled the "Mistress" of Pohyola or Lapland, and it is her magic that the Finnish heroes have most to fear and to combat. But Pohyola has also been taken allegorically as signifying the land of the dead, and as being

Bune 12, lines 449, st seq. (Crawford).

[†] Rune 12, lines 144, et seq. (Kirby).

Bune S. § Bune 41 (Whitley Stokes). | Bune 44, lines 252-3 (Kirby).

^{¶ (7)} A case of sympathetic magic. Presumably it was necessary for the stone to be streaked with colours so as to procure the same result for the lid of the Sampo itself.

synonymous with Tuonela. This is indicated more clearly in some runes than in others, especially when it is the land beyond a river which it is difficult to cross." Since, however, the spirits of dead Shamans were thought to be more powerful than living once-for which reason the Lapps worshipped their dead relatives-the land of the dead came to be regarded as a storehouse of Shamanic wisdom,† In either case, whether we take Pohyola to be the equivalent of Lapland or of Tuonela, Louhi as its mistress is all-powerful in sorcery, and the fact that she is a woman points to the participation of women in Shamanic rites; possibly they were originally the priestesses.

The reason why the sorcerer was said to obtain his milk from the land of the dead now becomes apparent :

> "They are few, but they are skilful Who can bring the milk from Mana, Secretly at night they brought it, And in murky places hid it."!

This milk was sour, and new milk was obtained "from other quarters." It, therefore, seems likely that the sour milk was not used for drinking, but for magical purposes.

There are many instances in the Kalevala of the creation of animals and birds by the sorcerers. Lemminkainen has but to rub some feathers between his fingers to create a flock of birds from them, and both he and the Master of Pobyola (= Paivola) create many other living things in their rivalry in conjuring. But there is no instance of the creation of human beings in this way; presumably the sorcerer had dominion only over the animal world, and had not a similar power over his own When Ilmarinen, who is able to make animals by means of his furnace, attempts also to make himself a bride, he fails lamentably. The only instance in the Kalevala of the actual production of human life is that of Lemminkainen's restoration by his mother, but this is done with the direct help of Ukko himself, without which it would have been impossible.

Though Finnish charms were spoken and not written, it was the word that was all-important, as is the case with other races. It was thought that the efficacy of the charm was lost if a single word of it was changed or omitted. Vainamoinen needed but three words to complete his magic versel, but, owing to their not being forthcoming, he was unable to proceed with his work. Lemminkainen, when dying, laments that he might have escaped his fate if he had only known the correct formula for charming water-serpents:

> "Two words only were sufficient, Three at most perhaps were needed, How to act and live still longer."

The Lapp sorcerers, like the medisoval witches, were supposed to have attendant spirits which had more or less animal forms. Among their shapes given by Scheffer in his Lapponia are fishes, birds, serpents, and pygmies a yard high. These spirits occur but rarely in the Kalevala, but various water-pygmies appear as helpers of Valuamoinen in answer to his prayers for assistance to the higher powers. Toruseus, quoted by Scheffer, says that the Laplanders "bequeathed the demons as part of " their inheritance, which is the reason that one family excels the other in this

^{*} B.g , in rune 49.

[†] Hence the visits of Vsinamoinen to Tuonela and to the grave of Vipunen, in order to obtain his three lost words of master-magic.

[!] Bune 32, lines 163 at say. (Kirby).

[|] Rune 14, lines 419-21 (Kirby).

[§] Rune 16.

[¶] e.g., in Rones 2 and 48.

"'magical art." This again was the case with the mediaval witches." Magical powers seem from the Kalevala to have been inherited; Lemminkainen speaks of his being taught magic by his father, and the passage telling of his initiation by his mother while he was yet a haby has already been quoted. WILFRID BONSER.

Archeology. Moir.

A Piece of Humanly-shaped Wood from the Cromer Forest 117

In the year 1897 Mr. W. J. Lewis Abbott published in Natural Science an account of some flaked flints found by him in the Cromer Forest Bed, which he regarded as being humanly fashioned.

Dr. W. L. H. Duckworth also, in 1911, published an account of this deposit ("Notes on the Cromer Forest Bed," Cam. Antq. Soc. Communications, Vol. XV),



FIG. 1s .- A PIECE OF HUMANLY-SHAPED WOOD FROM THE CROWER FOREST BED.



FIG. 15 .-- A PIECE OF HUMANLY-SHAPED WOOD FROM THE CROWER POREST BED.

and figured a specimen of a flaked flint of which he states that "one margin bears "marks precisely comparable to the finer working on an undoubted chert flake or "scraper (of the type of Le Moustler) obtained by me in a cave at Gibraltar." This specimen, Dr. Duckworth states, "was obtained by myself from the Forcet Bed "on the foreshore at Overstrand."

The piece of wood to which this note refers was found by Mr. S. A. Notentt, of Ipswich, who dug it out of the Cromer Forest Bed exposed at the base of the cliff south-east of Mundesley, September 1916. The beach had been recently scoured away by a storm, which removed the cliff talus. The bed in which the wood was found consisted of undisturbed sand and gravel, and was overlaid by clay in situ, presumably part of the Second Till. Mr. Savin, of Cromer, informs me that the

specimen, which I have submitted to him, is similar to some of the wood usually found in the forest bed, with which he is familiar. The specimen, as will be seen from the accompanying photographs, is slightly curved, four-sided, and is flat at one end and pointed at the other (Figs. 1s and 1b). It measures 63 inches in greatest length, and 21 inches in greatest width. The flat end appears to have been produced by sawing, and at one spot (indicated in the sectional drawing by an arrow, Fig. 2), it seems that the line of cutting has been corrected, as is often necessary when commencing to cut wood with a modern saw. The present form of the specimen is due to the original round piece of wood (presumably a stout branch) having been split four times longitudinally in the direction of its natural grain. drawing (Fig. 2) shows how the rings of growth are truncated by the splittings, and indicates, approximately, how much of the original branch was removed in the shaping process. The specimen has been identified by Dr. A. B. Rendle, F.R.S., as vew, and it seems clear that some practice and skill would be required to split a piece

of such wood so that the fracturesurfaces should converge and form the desired point, and that such manipulation, together with the apparent production by sawing of the flattened end, is wholly beyond the powers of any natural, non-human agencies. The specimen has its edges smoothed by rolling by water, and is of a brownish - drab colour. pointed end is somewhat blackened (possibly by the action of fire), and several small and superficial cuts are observable upon two of its surfaces. The use of pointed pieces of wood by ancient man has already been mentioned by Mr. Worthington G. Smith (see Man the Primaval Savage, p. 268), and I believe Mr. Hazzledine Warren discovered a wooden stake or spear in an ancient implementiferous deposit

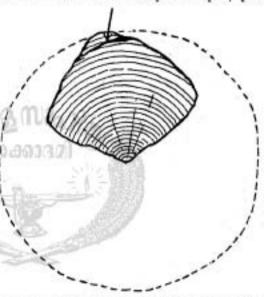


FIG. 2 .- A PIRCE OF HUMANLY-SHAPED WOOD FROM THE GROMER POREST RED.

(The detted line indicates approximately the original outline of the branch from which the piece of humanly-skepel wood was derived.)

at Cheton-on-Sea. I may say that I was able to visit Mundesley in September, 1916, and to see and examine the interesting exposure of the Cromer Forest Bed at the base of the high cliffs, from which Mr. Notcutt's specimen was derived.

J. REID MOIR.

Africa, West.

Thomas.

Secret Societies in West Africa. By N. W. Thomas.

My reviewer falls into a very natural error when he supposes that the native is responsible for the brevity of my account of secret societies. I should have been initiated into the Poro Society-which is by no means reprobated by the Government, and earries on its rites, if not in the light of day, at any rate with no more secreey than a Masonic ludge-but for the zeal, I, hope well meaning, of a youthful official, who obliged with his advice puisne judges, members of the Legislative Council, and anyone else whom their sins brought across his path. On the sive of my initiation he telegraphed to the chief, with whom I had carried on negotiations for many a month, forbidding him to let me go near Poro, Bundu, or any other secred bush; at the same time he favoured me with a disquisition on such matters which set his youthful years in some relief. I succeeded in collecting some information about Poro, which may some day be published.

N. W. THOMAS.

Central America.

Breton.

Amongst the many interesting manuscripts collected or copied by the late

Dr. Carl Berendt in Central America (during his years of political exile there,
1851-1878), and now in the library of the University Museum, Philadelphia, is a
Kekehi grammar. This language, still spoken in the district of Coban, in the
province of Alta Vera Paz, Guntemala, is connected with the Maya of Yucatan but
has many distinct qualities. The grammar or Arts exists in a volume of old copies
of documents in Kekehi and Pocomehi, No. 68 of Dr. D. G. Briuton's catalogue,*
and is a copy made in 1741 by Juan de Morales, Maestro fiscal, from a still older
one at San Juan Chamelco. It was recopied (No. 69) by Dr. Berendt at Coban in
1875, with additional notes obtained from an educated mestizo, illustrating the
present condition of the language. At the end of the old copy is a list of relationships, remarkable for its fullness. Those people avoided the use of an individual's
name, and therefore needed means of identifying everyone.

NAMES OF CONSANGUINITY.

Father (my) -	C.S	4		in haua
Mother	40	. (B)0:	96	in na
Grandfather -	*	*		in mama
Grandmother -	21.1	*		v ixaso
Great grandfather	32	-	P.	in xiquin mama
Great grandmother			Æ	in xiquin yxsan
Great great grandfather			뗾	y bana in xiquin msma
Great great grandmother	7400			y na in xiquin yxaan
Uncle, brother of my fat				yn tata
Uncle, brother of my mo				v iean
Aunt, father's sister				in na renab in haua
Aunt, mother's sister	2			in na y chakna† iu na
First cousin (cousin-broth	er) of a	my fath	er	vican ralal in tata
First cousin (male) of m				yn tata ralal in tata
First cousin (consin-sister			-	yn na y rabin y tata in haua
First cousin (cousin-sister				yn na y rabin y tata in na
Elder brother (my)				taar
Younger brother -				vitzin
Elder sister of a man				vanab
Younger sister of a man				vitsin lixkaal
Elder sister of a woman		-		in chakma
Younger sister of a wom			4	in chak

^{*} The Museum Bulletin, Vol. II, No. 4, May, 1900.

[†] h is used here throughout to avoid the extra letter, the hard double "c," which is also needed for Kekebi. Kak-chi might be more correct, as the early Potomechi vocabulary spells it so, but Murales has kenek-chi, and Kekebi has been adopted by Garman writers, ohi being tongue, and in Potomobi, language. A. Recinos, of Guatemala, has Quechi.

and in Possmoti, language. A. Recines, of Guatemala, has Quechi.

† ", the possessire" my," would be pronounted u. The early writers were reckless in using gu, hu, b, v, or u for what was, presumably, to them the same sound, and words are often difficult to recognise for that reason. r is the third person possessive.

Inlas. Man's son Woman's son Fal Man's daughter nidar Woman's daughter - ixkaal (or) ko Grandson - -- in mam Granddaughter -- vi, in co Great grandson in xiquin mam Son of my elder brother -- in cahol, ralal y vaz Daughter of my elder brother - yn rabin y rabin y vaz Son of my elder sister - vicak, ral vanab Daughter of my elder sister vicak, rixquial vanab Son of my younger brother valal, ralal vitzin - yn rabin, y rabin vitzin Daughter of my younger brother valal, valal vitzin Son of my younger sister Daughter of my younger sister -- in rabin y rabin y vaz in co, ral in chak in mam, raial y cahol y vas Son's son of my elder brother in mam, y rabin y cahol y vaz Daughter's daughter of my elder brother yn mama, raz in xiquin mama Guandfather, brother of my grandfather vixaen ranab in mama Grandmother, sister of my grandfather -Brother of my grandmother in mama, raz vixaan vixaan y chak y vixaan Sister of my grandmother in mama, raz in xiquin mama Brother of my great grandfather runab to xiquin mama Sister of my great graudfather ras in xiquin ixaan Brother of my great grandmother y chak in xiquin ixaan Sister of my great grandmother y chak na in xiquin ixaan Elder sister of my great great grandmother Nephew, niece -

NAMES OF MATRIMORIAL APPINITY.

- in belom My husband vixakquil My wife -In hanz y hana y vixakquil Father-in-law, my wife's father in haus y haus in belom Father-in-law, father of my husband in na y na ln belom Mother in-law, my husband's mother in na ix na liuixaquil (Berendt) Mother-in-law, my wife's mother vachalib, rachalib rib The two fathers-in-law of a couple (consuegros) (my fellow father-in-law). vachalib The two mothers-in-law (consuegras) vicham, raz in belom Brother-in-law, my husband's brother valib ranab in belom Sister-in-law, my husband's sister . in bale, raz vixakquil Brother-in-law, my wife's brother vixnam y chak vixakquil Sister in-law, my wife's sister - vicham raz in belom Male cousin of my husband - valib y rabin y tata in belom Female cousin of my hu-band - vixnam, y rabin y haua vixakquil Female cousin of my wife - vicak, incahol ralal in bale My brother-in-law's sons vicak, in rabin, rixkquisl in bale My brother-in-law's daughters - valal, ral y vixuam My sister-in-law's sons valal, ralul y raz vixakquil Sons of my wife's brother - in rabin y rabin raz yixakquil Daughters of my wife's sister - in cahaua, y cab in haua Stepfather . in ca na y cab y na Stepmother [175]

Daughter-in-law, my son's wife - valib, rixakquil y valal
My daughter's husband - in hi, y belom in rabin
Wives of two brothers - - vechixk rib
Wives of one husband - - vechixk yn coh na

The above is translated literally from the Spanish text. Mama (grandfather) was used also in Pocomchi, and applied to an elderly man as a term of respect and affection, as explained by the priest-author of the (fragmentary) manuscript Pocomchi vocabulary (written about 1685), also in the Berendt collection. He says it was the customary salutation given him by the boys he met. In Pocomchi, mam was grandfather and also grandson, according to the speaker, but used to grandsons and granddaughters by men only. Not many relationship terms are alike in Pocomchi and Kekchl. In Pocomchi mother is tut, and in Cakchiquel te.

Except Dr. Stoll's volume on modern Kekelii and some local study of it by Dr. K. Sapper, no serious work has yet been done on this interesting languages which differed as much from Pocomohi as Spanish from Italian, although they were spoken in neighbouring districts.

A. C. BRETON.

Ethnography.

Du Caillaud.

The Burgundian Switzerland. By F. Romanet du Caillaud, Fellow of the Geographical Society of Paris.

The modern geographers divide Switzerland into two ethnographical parts according to the languages used in those respective parts. In the west "Romand" Switzerland comprises peoples speaking a Latin language, viz., Italian in the canton of Tessin, French in the cantons of Geneva, Vand, Neufchütel, the greater part of Fribourg and Valais, and that part of the canton of Bern named the Jura Bernois, which, at the beginning of the 19th century, was the French Department of Mont Terrible. In the east is situated German-speaking Switzerland, which now is commonly called Alemanic Switzerland. This name is very improper ethnographically, for it pre-supposes that the inhabitants of these eastern Swiss cantons descend from the German people named Alemans. This is incorrect, for the part of Switzerland comprised in the boundaries of the Roman Province of Maxima Sequanorum is bounded north-easterly and easterly by the Rhine, afterwards by the Thur and the Sitter, the Rhine's affluent and sub-affluent, in fine, by the Alpine crests limiting the Rhine's source basin in the west.

The Teutonic people who settled in Switzerland at the time of the Barbarian invasions is the same as that which occupied the south-east part of France, viz., the Burgunds, or Burgundions.*

At the beginning of the 5th century the Burgunds took possession of Muzima Sequanorum and of the greater part of the Rhône Valley. In the conquered territory they required from the Gallo-Romans a third of their slaves and two-thirds of their lands, and then they lived on the best of terms with the conquered people.

As in their previous habitat in Germany, on the Rhine's right bank, they were principally timber workmen,† many of them settled probably in the forest districts of Helvetia, where they could continue their wonted method of livelihood. Therefore those districts lost their Celtic or Latin languages, and got a Teutonic idiom.

^{*} Prenounce Beorgeoidess. With that name the French, cliding the "d" of the last syllable have made Beorgeoides or Beorgeoides, becoming afterwards Beorgeoides. Beorgeoide (pronounce Beorgeoide), the Latin name of the Burgands' land, became Beorgeoide in French by an evolution similar to that which made the French word veryogne, with Latin noun verseundes.

[†] Sant enin fabri lignarii ovenes. (Socratis Historia Becleviastica, 18b. VII, Cap. xxx.)

At an earlier period in Germany the Burgunds were bordering upon the Alemans; there they fought with them because of their frontier,* and were sometimes allied with the Romans against the said Alemans.*

Morally the Alemans and the Burgunds were very different. The Alemans had in the 3rd century sent into Gaul an invading horde, commanded by their king, Chrocus. That horde committed in Gaul many cruelties, from Trèves (Augusta Trevirorum) to Angoulême (Inculisma), where they martyrized the bishop, Saint Ausonius, and from Angoulême to Arles (Arclate), where they were finally annihilated by Marianus, the president of the Narbonensis Province, who captured Chrocus, their king, and beheaded him.2

On the contrary, the Burgunds were as kind as the Alemans were cruel. They had spontaneously become converted to Christianity while they were still in Germany. While there they were often attacked by the Huns, and as they had observed that the Huns were always vanquished by the Bomans, they reflected that the cause of the Romans' victories was the protection of their God, and, therefore, resolved to become Christian. They went to a neighbouring city of Gaul, and from the bishop thereof requested Christian baptism. The bishop ordered them to fast seven days, and, when they were instructed, baptized them. So the Burgunds were the first German people converted to Christianity, and were converted while still in Germany.

They were Catholic, and when they invaded the province of Maxima Sequanorum and the Rhône valley, they remained Catholic. King Hilperic, the father of Saint

Clotilda, and his family were Catholic-

King Gondbald (Gondeband), who killed his three brothers (among whom was the aforesaid King Hilperie) for usurping the whole Burgundian kingdom, renounced the Catholic faith and became Arian, with several Burgundian leades (chiefs), about 480, but in 501, vanquished by the Frank king, Hlodwig (Clovis), who had married Saint Clotilda, he was obliged by a treaty to return to Catholicism. His son, Sigismund, favoured much the extension of the Catholic faith. Defeated by the sons of Hlodwig, he was captured by one of them, Hlodonin, Frank king of Orleans, and killed; he is venerated as a saint in the Catholic Church.

In their invasion of Roman provinces, the Burgunds and the Alemans continued to be neighbours; the Alemans occupied Vindelicia, the Burgunds Maxima Seguanorum. That occupation for the Burgunds was accepted by the Roman Imperial Government, under the condition of a military alliance. As previously in Germany, the Burgunds did not allow any usurpation by the Alemans of their frontier. So it is almost certain that the colonizing Teutonic race west of the Thur and Sitter rivers is the Burgundian race.

In 534 the Burgundian kingdom was conquered by the Franks, and became a Frank kingdom, the Burgundian people keeping their rights and being assimilated

6 That Bishop was supposed to be Saint Severes, Archbishop of Trèves (Moreri, Dictionnaire Aistorique, Ameterdam, 1694, article "Bourgogne."

Salinarum fintungue causa Alemannis sope jurgabant Ammiani Marcellini Historia, lib. XVII.
 † Repecially in the time of Emperor Valentinian I, about 370. See Ammian Marcellin, Hist.
 etc., lib. XVII and XVIII.

¹ Gregorii Theronousis Historia Francorum, lib. I.

^{||} Socrates, for. etc. According to Socrates the date of that conversion was the year of the 13th consulate of Theodosius II, and 2rd consulate of Valentinian III, but whereas at such a date the Burgands were in Goad, far from the Huns, it is probable that the said date is the epoch at which the conversion of the Burgands was known in Constantinople. At the time of Valentinian I, about 370, the Burgands, then in Germany, were already attracted to the Bounans' religion, for then they called themselves brothers of the Romans. Sobolem se case Romanom Burgands's seisent (Ammian Marcellin, loc. cit.)

to the Frank people. Then that part of Helvetia lying east of the Great Emmen River was separated from the Frank kingdom of Burgundy, sauexed to the Frank kingdom of Austrasia, and, therefore, united to the dukedom of Alemania, a dependency of the Frank kingdom of Austrasia. But the Burgunds inhabiting the said part of Helvetia remained undisturbed, like those of the Frank kingdom of Burgundy.

The Teutonic accestors of the Swiss between the Great Emmen and Sitter Rivers are not Alemans, but Burgunds. Similarly Burgunds are the Teutonic ancestors of the Swiss between the Great Emmen River and "Romand" Switzerland, especially of those of the great canton of Bern. So most part of German-speaking Switzerland must be named Burgundian "Switzerland."

F. ROMANET DU CAILLAUD.

South Africa.

Torday.

The Zulu Gult of the Dead. By E. Torday.

In his highly interesting paper on "The Zuln Cult of the Dead," Max, 1917, 95, the Rev. A. T. Bryant states that the Baluba, in the Southern Congo, call the diviner muLoshi. I should like to point out that this name has never been used in my presence except as applied to the witch and wizard, to persons possessed by the evil spirit and such as practising black magic. The divinor was variously called mpuka, mucha, mutempecki, etc., according to the character of his divination; but some of these diviners may, of course, be witches at the same time, and this fact is probably the cause of Mr. Bryant's mistake.

E. TORDAY.

REVIEWS.

India.

Sarkar.

The Folk Element in Hindu Culture: A Contribution to Socio-Religious 122
Studies in Hindu Folk Institution. By Benoy Kumar Sarkar. Longmans & Co., 1917. 15s. net.

Mr. Benoy Kumar Sarkar is a Professor of the National Council of Education in Bengal. Now just as the Gaelic League in Ireland devotes its energies to stimulating the Celts to the idea that they ought to form an independent State talking its own language regardless of the facts of this commonplace world, so the National Council of Bengul is absorbed in proving to its own satisfaction that Indians belong to one nation. Of course, it is necessary for Nationalists of this type to think of India as only a Hindu India, and to forget the existence of sixty million Muhammadans. They are also obliged in default of any predominating Indian language common to the nation to express their call for unity in English. wishers of India and Ireland cannot but feel regret at the loss of valuable power which might so much better be diverted to the development of the country, and to the real union of diverse communities, whose interests are bound together. At any rate, however landable the intentions of such workers may seem to themselves, their efforts do not tend towards those logical and scientific workings of the mind which, it is essential, should be possessed by anthropologists. If a writer starts off with false premises, it is not easy to accept the rest of his deductions.

Mr. B. K. Sarkar leads off in his preface with such remarks as the following:

"The religious beliefs, practices, and customs of the people are fundamentally the

"same in India, China, and Japan." Elsewhere he writes: "In spite of the

"rigidity and inflexibility of customs and social life brought about by codification

"of laws in recent times, and notwithstanding the narrow provincial spirit of

"modern educated Indians, due to the growth of habits and sentiments in water
"tight administrative compartments, the soul of India is really one." After noting
the above farrage of nonsense one is the less tolerant of the usual jumble of
impossible tales which roused Lord Macablay's ire two generations ago. They may

represent the beliefs of a section of the countryside of Bengal, but we are not prepared to accept them as Hindu culture or to take Mr. Sarkar as a reliable guide. It appears, indeed, that the material of this book was collected by one Mr. Haridas Patit, and that Mr. B. K. Sarkar, during what Lord Hardinge has called the auxious years for India of 1915-16, has written it up partly in the U.S.A. and partly in China, to suit the workings of his particular type of mind. AUBREY O'BRIEN.

Anthropology. Havemeyer.

The Drama of Savage Peoples. By Loomis Havemeyer, Ph.D. New 123
Haven: Yale University Press; London: Oxford University Press. 1916. 123
7s. 6d. net.

Considered as a form of human activity that has engaged the thoughts of some of the greatest of human intellects and formed the world in which their ideas have been cast, the drama has special claims on the attention of scientific Anthropologists. Dr. Havemeyer, who is, as the title-page informs us, the Instructor of Anthropology and Geography in the Sheffield Scientific School of Yale University, has here sought to formulate and work out a theory of the origin and development of the drama. Beginning with the gesture-language that must have preceded speech, and with the desire to imitate which is universal in mankind, though not everywhere equally developed, he discerns the beginnings of the drama in the rites performed in the lower culture to ensure the food supply, which are, in effect, "appeals made to the " gods and spirits through sympathetic magic "-hence mimetic. These appeals begin on the lowest plane among hunters, such as the Australian Blackfollows and the Bushmen, and continue up into a comparatively high civilisation. Dancing is found among all savage peoples; indeed, in the shape of skipping and jumping about it "was " probably of more primitive origin than the drams," by which the author seems to mean that human restlessness, resulting in playful activity and rhythmical movement, is earlier than the earliest ceremonies. There is, further, the desire to tell and to re-enact scenes of interest, first to the individual, and then to society, such as the events of a bunting expedition or a hostile raid. Beginning even before the development of language, these were expressed by signs, by imitation of the acts of the hunter and his prey, or of the fight, and as language gradually unfolded were told as stories. Puberty rites and initiation and totemic ceremonies were an application and extension of these various lines of development, and, with ceremonies performed on other occasions, they really formed a sort of sacred history of the community, or at least a representation of important events of the past. Ultimately such representations were performed merely for pleasure, and became divorced from their religious intention. As civilisation evolved, they evolved with it, issuing at length in the theatre of the Greeks and the elaborate plays of the Japanese.

The theory, which can hardly be said to be worked out with the detail it demands, appears, on the whole, to be on right lines. In the earliest stages more attention might profitably have been paid to the human play-impulse, the playactivities of the lowest culture, and the gradual unconscious hardening of dances and other performances at an interval of leisure or overflowing emotion into magical and religious rites. The rites to ensure food supply are not necessarily "appeals to gods and spirits." Begun at first their performers hardly knew why, though we may assign psychological reasons for them, they are continued very often without any definite reason beyond that they were somehow or other believed necessary. Dr. Havemeyer generalises, too, I think a little rashly, from the rites of the Arunta as to the habit of totemic groups to go through dramatic rites to increase the food-supply. Nor is it wise to speak of Australian "gods" without defining the sense

It would be an interesting, and possibly a profitable, thing to attack once more the vexed question of the Attic drama, and to attempt to define the relations of the tragic, the comic, and the satyric drama. Dr. Havemeyer's line of argument seems to suggest that the satyric drama may be at the base of the evolution, and possibly the old doctrine of scholars may, after all, be right. The theory of the origin of the Japanese drama needs additional syidence and discussion, especially in view of Professor Ridgeway's argument.

These observations are intended to suggest points on which further consideration is desirable. His little book is obviously not exhaustive, but rather a popular presentation of the theme. As such it will afford an introduction calculated to interest readers, and lead them on to further researches in a direction only beginning to be

explored and rich in potentialities.

Finally, however, I must be allowed to gramble. The author gives us, very properly, a bibliography of the authorities to which he refers, but omits an essential part—the date and place of publication of the works—so that it is impossible sometimes to identify and refer to them. And why use that very ugly word "societal," when "social" or the phrase "of society" is at his service?

E. SIDNEY HARTLAND.

Burmah. Start.

Burmese Textiles from the Shan and Kachin Districts. By Laura E. Start. "Bankfield Museum Notes, Second Series—No. 7." F. King and Sons, Ltd., Halifax. Price 3s. 6d.

This is a valuable addition to the series of "Notes" which are due to the enterprise of Mr. H. Ling Roth, who is making use of the material in the Bankfield Museum, and in other museums, to increase our knowledge of textiles and their methods of manufacture.

The textiles dealt with by Miss Start were collected a few years ago by Mr. E. C. S. George, C.I.E., and comprise garments, wallets, and a few other objects made and used by the Shan and Kachin peoples. The descriptions are clear, and the numerous illustrations play an essential part in the clucidation of a complex subject. The author makes a few suggestions as to the origin of particular patterns but has avoided speculation.

As a useful piece of descriptive technology the paper will be of service to those interested in textile ornament, whether from the artistic or the comparative standpoint.

H. S. H.

South Africa: Linguistics. Jones: Plaatje.

A Sechuana Reader (Lipalo tsa Sechuana) in International Phonetic 125
Orthography (with English Translations). By Daniel Jones, M.A., Reader in Phonetics in the University of London, and Solomon Tebekisho Plantje, editor of the People's Friend, Kimberley: author of Sechuana Proverbs and their European Equivalents. London: University Press.

This book marks a new departure of a very interesting kind. Some preliminary attempts at transliteration from African languages had appeared in the Maitre Phonétique before that useful publication was suspended by the war, and Mr. Jones's pamphlet on the Pronunciation and Orthography of the Chindau Language (1911) was a valuable piece of pioneer work. In the one before us, he has, with the assistance of Mr. Plaatje, made a very thorough analysis of Sechuann speech-sounds, and more especially of the tones, which have been studied more fully than has ever yet been done. In fact, their existence had scarcely been recognised in this country.

though, on the Continent, Endemann and Meinhof were fully aware of their importance. (Rademann, Versuch einer Grammatik des Sotho, pp. 25, 26; Meinhof, Lautlehre der Bantusprachen, p. 86). Endemann, however, only mentions three tones, while Mr. Jones has discovered at least six. Older writers on this and similar languages, when aware of the tones, appear to have mistaken their real nature-e.g., the Rev. John Brown (Seemann Dictionary, p. 6) says, "in some cases only a very " slight difference in sound or emphasis distinguishes one word from another"; and even so acute an observer as Bishop Colenso, while in one case describing the phenomenon correctly, ("Some words . . . are distinguished in utterance by " the voice being depressed on a certain syllable . . . Ex. beka, put down : " běka, look ; wmuzi, hemp or flax in the rough state ; wmůzi, kraal . . . "-First Steps in Zulu, section 17), sets it down, in another, to "stress." section 18: "In conjugating verbs, it will be seen that the second and third " persons singular are often alike is form. But a stress is thrown upon the pronoun " in the former case and on the verb-root in the latter. Ex. uyatanda, then lovest; " uyatanda, he loves.") Experience shows that it is quite easy to confuse pitch and stress, especially when unprepared for the occurrence of the former. Mr. Jones has discussed the subject of tones very fully in sections 52-81, and has printed, on p. 37, a whole text with the pitch of overy syllable expressed in musical notes, which should be a great assistance towards acquiring the right intonation.

There is still a certain amount of misconception abroad as regards the script of the I.A.P., which has been used by Mr. Jones in his transliteration; and it may be well to state once more (I) that it has nothing to do with the use of "simplified," "improved," or "phonetic" spelling in writing English, though the two things may sometimes be advocated by the same authority, and (2) that it is designed for the use of Europeans, not of natives. Being intended for application to every language, it naturally has, on the principle of "one sound, one letter," to include a symbol for every sound known to occur; but in practice it can be considerably simplified, as no language is likely to contain all, or even most of them. Where a language has not yet been reduced to writing, it would be well if a simple form of it could be adopted for teaching natives to read; where a recognised orthography is in existence, it will be difficult and perhaps undesirable to displace it, though some modification may be possible. The case is peculiarly unfortunate when—as at Kikuyu and elsewhere—injudiciously chosen symbols have been perpetuated by special founts of type.

Sometimes it is a question, not of one recognised orthography, but of several conflicting systems, none of which, perhaps, is entirely satisfactory. This is the case in Sechuana, which, as Mr. Plantje points out (Sechuana Proverbs, p. 13), is written in no less than five different ways. Here, one would think, nothing but good could result from the abolition of all five and the adoption of the LA.P. script, with simplifications on the lines of those indicated by Mr. Jones in sections 10, 21, 26, 36, 37, 45, 50, 64. It is a question how far it would be necessary to mark the tones for natives. At first sight, one would be tempted to say that, being familiar with the words, they could not, when recognising them in their connection, fail to give them the right pitch. But it is remarkable that, as Mr. Plaatje points out (Preface, p. ix), "the younger generation of Bechuans are to some extent losing the " original Sechuana tones. This is particularly the case in the south of Bechuana-" land"; and he implies that this process might be arrested by "a study of the "phonetics of Sechuana." One wonders, however, whether this may not be an inevitable step in the evolution of language, pitch (that is, pitch inherent in a word and distinguishing it from one otherwise similar-not the modulation of words in a sentence), being a characteristic of language in a very primitive stage. It is, for

instance, more prominent in monosyllabic languages like Twi and Ewe than in Banta speech, where the combination of syllables reduces the possibility of homonyms, and where the stress and pitch accents subsist side by side. At the same time, it must not be forgotten that the presence of tones has often been overlooked, and they are extremely important, e.g., in such a typical Banta language as Shambala (see Rockl, Schambalasprache, 1911); and it is a remarkable fact that they have penetrated into Hausa, of which the groundwork is Hamitic, though purely Hamitic languages, such as Berber and Galla, do not possess them. They appear to exist, to a certain extent, in Ganda, though it has been strongly influenced from the Hamitic, and little, if at all, so far as one can judge, from the Sudanic side.

The fifteen texts, twelve of which are original, specially written for this book by Mr. Plastje, will be found exceedingly useful by learners.

A. WERNER.

Linguistics.

Dennis.

Elementary Grammar of the Ibo Language. Third edition. Revised by T. J. Dennis. Pp. viii, 116. London: S.P.C.K. 1916. Price 10d.

This edition represents a great advance over Spancer's little work, but even now it is very far from complete. On the phonetic side there is little information; there is a long list of nouns and verbs distinguished by tone, but no statement as to the number of tones, still less as to the rules that govern their use; the rising tone heard in fe (to pass) and other words is completely ignored.

A number of dialects are noticed—there are perhaps nearly thirty Ibo dialects in all—and it would have been advantageous, especially in the part dealing with the

verb, if the name of the dialect had been given in every case.

It frequently happens that rules are half down on an insufficient basis; thus (page 48) certain verbs are mentioned as not affixing vowels in the subjunctive and imperative, among them bu (10 see); but no mention is made of any suffix in the indicative, though one is commonly used, e.g., afoam alo (To see a forbidden thing). In the Asaba dialect this suffix form has, according to an ex-schoolmaster formerly on my staff, a past signification, which is in other cases shown by a difference of tone.

Under the head of numerals, mention might have been made of the Awka usage of giving higher numbers as multiplicatives in the form "x in y places z times."

In a grammar, however, that does not profess to be more than elementary, it is impossible to deal at length with all possible points; it is very desirable that the exhaustive grammar tentatively promised in the preface may see the light at an early date.

N. W. T.

Mythology.

Dixon.

The Mythology of All Races. In Thirteen Volumes. Vol. IX.—Oceanic.

By Roland B. Dixon, Ph.D., Professor of Anthropology, Harvard University.

Boston: Marshall, Jones Co. 1916.

To publish The Mythology of All Races in thirteen volumes is a grandiose scheme. Any ordinary man who knows how vast the subject, what contentions are involved, what reams and reams of paper, what oceans of ink have been wasted over those contentions, and how many of them are still in dispute, would shrink aghast at the thought of it. Yet an editor has been found daring enough to conceive it, and what is still more remarkable, specialists have been found willing to assist in carrying it out.

But the first criticism that occurs to a scientific reviewer is that to treat the

mythology of a people apart from its religion and social organisation—from its civilisation—is fair neither to the people, nor to the mythology, nor to the writer, nor to the reader. The mythology of a people cannot be understood apart from the general culture and environment. To delineate it without taking these into account and setting out from them is to produce a picture that is incomprehensible. Such a presentation is, of course, not intended for anthropologists, but for the non-scientific public. Yet it may be greatly doubted how far it is of real value for that purpose. The specialist employed to make the attempt may do his best; he may be learned, skilful, brilliant. He labours on an impossible task. For he cannot convey to the reader's mind a clear notion of his subject; to the reader the social and intellectual medium in which the mythology has been produced is a blank. Consequently the mythology, when all is said and done, remains an enigma.

In the volume before us, Professor Dixon, well-equipped and brilliant as he is, has not been able to overcome this difficulty. Most readers may be presumed to know enough of geography to have a general notion of the South Sea Islands. What they need will be some more or less detailed information on the ethnology of the various groups of islands;—and that, by the very idea of the series to which the volume belongs, is denied to them. They may get it elsewhere, but not in a form that will show it in relation to the various points urged by Professor Dixon. The plates in the volume, fine as many of them are, do not help. They show figures of native gods and amulets, masks, and mythological subjects. But these have little reference to the text; and, beyond the short description fronting each plate, no necount is given of them, or of the uses to which the masks and amulets are put. If we consider the part played in the life of the islanders by the performances in which the masks are employed, and their intimate relations with the religious beliefs, it becomes obvious how large a lacuna this entails in the presentation of those beliefs. The religious practices are altogether omitted.

We cannot, of course, hold the author responsible for this. It is a serious fundamental defect in the series of which the volume on Oceania is a part; and the responsibility must be laid on those who projected and those who have edited the series.

Subject to the above observations, it must be said that Professor Dixon's account of the various mythologies under review is given with considerable success. He has selected and summarised the tales with judgment. (No attempt has been made to emphasise the picturesque features of the narrative-a process fraught with danger, very tempting in a work designed for "the general reader," but only tolerable when performed with consummate knowledge and skill. His chief pre-occupation has been to trace the relationships of the mythologies of the different peoples. If, as is now generally held, the islands of the South Sea were populated by successive waves from the south-east of Asia, it is highly probable that the traditions should be found to contain common elements, and, perchance, common memories of earlier conditions. But to arrive at any definite conclusions which shall be reasonably certain requires a more profound knowledge than we have yet acquired of many of these populations, and our arguments must, above all, be guided by caution. The author recognises this, and in the preface he admits frankly that those at which he has arrived are merely provisional. To trace the derivation of a tale from country to country is doubtless alluring. But we are apt to find it too often a mirage :

"The sparkling waters Fade into mocking eards as we draw near."

Take the swan-maiden theme—a theme known practically all over the world. Numerous variants have been recovered from Indonesia, and a few smong Melanesians and Polynesians. The author divides the Indionesian variants into two groups, of

one of which he says its "direct Indian origin is unmistakable," and that it "has " spread widely wherever this early influence has come"; while the other "is " native in all its essentials, although this simple and apparently aboriginal type " may, after all, be a local imitation of a foreign theme." That Indian influence has played a considerable part in certain of the islands of the East Indian archipelago it would be absurd to deny; the effects are patently visible in art and in tradition. But "the type [of the swan-maiden tole] common in India and European mythology" is by no means confined to India and Europe. That its Indian origin is unmistakable is a hold statement indeed. It is found among the Eskimo; it is found in China; it is found among the Haida in Queen Charlotte Islands; and the onus of proving that it came from India lies upon those who assert that provenience. Nor, on the other hand, is this type the only type common in Indian and Europe; the variants are endless, though all based upon a common world-wide idea.

Take another type—that of the children born from a clot of blood. So far from being special to Melanesia, it is found among the Zulus and among the Blackfoot of North America. The similar story of children born from a blister in Melanesia, Indonesia, and Micronesia is also told by the Masai and by the Dakota; it is told in British Columbia, in Nigeria, and in the Caucasus. It is, therefore, no peculiarity of "Oceanic tales." The incident of the pool-mirror is by no means to be confined to Melanesia and Indonesia; it is common in the south of Europe.

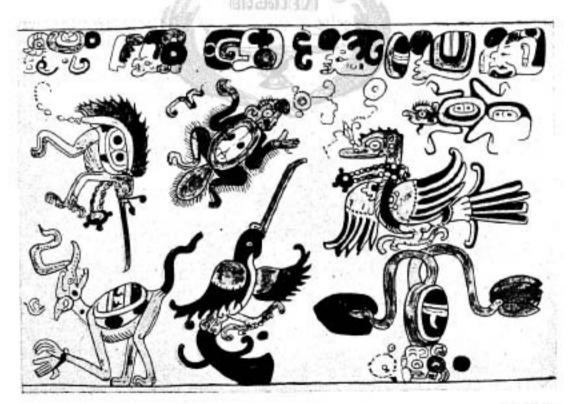
In the same way we might go over almost all the story-incidents in "Oceanic" mythology and show that they are of very wide-if not universal-distribution. It is very hard, therefore, to claim them as disseminated from any one centre, or to rely upon them as evidence of a specific cultural influence. It can, of course, not be denied that transmission is possible, or that it has taken place again and again. But the difficulty is to prove any individual case, apart from written evidence. And the inferences, when a case has been shown to be probable, must be drawn with discretion. For the transmission may have taken place by the fortuitous encounter of one who was a good storyteller, and hence need not prove general cultural influence. When a number of instances in the same area can be shown the claim may be strengthened. But in view of the diffusion of incidents throughout the world-and traditional tales are usually, or largely, made up of strings of incidents not necessarily dependent upon one another or on the main plot-it is practically impossible to trace the centre or the course of distribution. The reaction, natural enough, against Bastian's Elementargedanken has produced what is called "intensive research" in various fields. That this new method will produce valuable results no scientific man can doubt. The ultimate form and reach of those results, however, pobody can anticipate.

One more criticism, which I regret must be one of disapproval. I know not what reasons have determined the placing of the references and other notes at the end of the volume. "Leaving the pages unencumbered for those who wish only to get a "general idea of the subject" is a very insufficient and unscholarly reason. Superficial readers need not bother about the notes, even if they are, as they ought to be, at the foot of the page. Readers who do require to refer to the authorities are annoyed by the continual necessity of turning to and fro, and by the difficulty of finding what they want even then; for the pages to which the notes relate are not indicated. Neither author nor editor—I cannot say which is to blame—has a right to throw this difficulty in the way of a conscientious inquirer.

E. SIDNEY HARTLAND.



A. C. Brahm



A. C. Braton

FIG. 2,-DESIGN ON A POT FROM A MOUND IN DRITISH HONDURAS, GANN COLLECTION.

ORIGINAL ARTICLES.

Calisthenics.

With Plate M.

Breton.

Central American Dance Scenes. By A. C. Breten.

The scene in Fig. 1 of Plate M is an episode of the painted sculptures that covered the interior walls of Chamber C in the North Building* of the great Ball-court at Chichen Itza, Yucatan. Although much weathered, it is a vivid presentment of a player on some musical instrument singing a flowery hymn, whilst a man in a bird-mask, with his body covered with plumage, is dancing, and a similar figure claps hands. Ceremonial dancing in costume was general in ancient America, and continues so to the present day, but was not often represented in art, and amongst the many hundred human figures in the sculptures and freecoes of the ruined buildings at Chichen Itza this is almost the only example. The sculptured warriors in Chamber E (so well reproduced with their weapons and ornaments in Dr. A. P. Mandslay's plates) stand quiescent in their orderly rows, and the freecoes of Temple A and the uppur chamber of the Monjas are mainly of battle scenes. Small caryatid statues and reliefs were also a prominent feature in the later buildings.

The player's instrument is so much worn that details are not clear, but it may have had strings. Strange primitive harps were still in use by the country folk in Mexico twenty years ago, and pleasant music could be evoked from them. The song or hymri may be compared with those of the two foremost personages who face the scrpent hero in Chamber E and with that of the priests in the wall-painting at Teotibuacan, but the bird is an exceptional addition. The dancer says nothing, but the figure behind has the conventionalized scrpent jaw speech.

In the drawing the joints of the stones are omitted, as they are roughly fitted and extremely worn at the corners and edges, although protected by part of the roof vault that remains. In fact, comparing their condition with that of the well-cut and fitted stones that form the external facing for veneer to the thick mass of rubble of which the walls consist, one is led to suppose that the reliefs were set up here after removal from some other spot.

An original feature is that the main, scene does not occupy the whole of the principal wall of the long, narrow chamber that constituted the building, but the scenes of the side-walls overlap without any division or border line. In Fig. 1 the design is on the two sides of an inner corner.

Fig. 2 of the Plate is from a painted pot found by Dr. T. Gann in a mound in British Honduras, and is in his collection at the Liverpool Museum. The pot is plain in shape (it may have been used for libation), is nearly 16 cm. high and 46 cm. in circumference. It was coloured with a glowing pale orange tint on which the figures were drawn in dark brown and scarlet, forming a panel, the rest of the pot being covered with the dark brown, except that the back has a diagonal orange stripe that separates two orange circles 8 cm. in diameter, each containing a mystic design in brown. There are also five objects that look like sprouting seeds.

The strange creatures in the panel appear to be dancing and singing in joy for the coming of vegetation, represented by the seedling in the corner. In Die Nayarit Expedition,† Dr. K. T. Preuss well described the beliefs of the Cora, dwellers in natural conditions and able to see and join in the rejoicing of the creatures, and their prayers and thanksgivings at the springing up of the young corn. His translations of their hymns, and Miss Alice Fletcher's ." Hako Ceremony," give a good idea of the poetic imagination inherent in the Indian. The humming bird was the especial messenger of the sun to awake and encourage vegetation, and has a prominent place

^{*} See Proceedings XIX International Congress of Americanists, Washington, 1917.

[†] Beviewed in MAN, 1918, 60.

in Fig. 2, whilst the serpent bird hovers over the seedling. The peculiar claws of these birds are identical with those of the birds in the coloured stucco reliefs at Acanceh, in Yucatan. It would seem a natural result of watching the migrating birds in spring that man should try to imitate them in his ceremonial dances. The bird over the seedling is Dr. Mandslay's "Serpent Bird," so frequently represented in Central American art. Its tail is similar to those of the scrpents in the reliefs on the great building at Xochicalco, near Cucrnavaca, Mexico, the outer plumes turned in the opposite direction to the others. Thunder Bird (Eneti), and Lightning Snake (Hoietlik), are seen in connection in succent reliefs on the coast of British Columbia, where the Clayoquot retain traditions of them and their doings.

This is not the place to work out the connections between the ideas in different parts of the American continents, but the gestures of these creatures may be compared with those on British Columbian totem poles. Bird insignia and symbols were universal. In an account of ceremonial dancing in honour of the arrival of visitors at Massett, Queen Charlotte Islands, the principal feature is described as follows:†

"The head chief's headdress or shihid here the crest of the tribe in front, inlaid with mother of pearl, and surmounted by a circlet or crown of bristles of the sea lion, forming a receptuele. This was filled with engle or swan's down, very fine and specially preserved. As the procession danced round in front of the visitors, chanting a song of peace, the chief bowel before each and a cloud of the down descended in a shower on the guest. Thus peace was made and scaled."

At the great dancing festival at Tialmanaco, on the border of Bolivia and Peru (on the day of San Pedro, 1910, still the same as described by Squier), the dancers were crowns of very long feathers, having the effect of the tops of royal palms, and as they danced round they bowed deeply towards the centre of the circle. Knotting feathers together in a special way with very fine thread for crowns and other dance cromments, was practised in ancient Guatemain, apparently like those collected by A. Frič among the peoples of the Chaco.

A. C. BRETON.

Obituary. Read.

Worthington George Smith. Born 1835, died October 27th, 1917.

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By the death of Mr. Worthington Smith science has lost a devoted son. His long and active life was full of usefulness, and his kindness of heart and unassuming manners will endear his memory to a wide circle of friends. As his sympathies covered an extended field, so his accomplishments enabled him to present to the public the results of his unremitting labours in a form at once practical and attractive.

His artistic career started with the very sound beginning of a study of antique marbles, followed by a training in architecture. But even then his real bent was towards natural history, and the attraction of nature, beginning thus early, held his affections all his life. As illustrator or editor his activities were chiefly given to such publications as the Gardener's Chronicle or the Floral Magazine, while he published books and broadsheets on fungi, a subject of special interest to him. In these publications he had in many cases the signal advantage that, being a wood engraver of great talent, he was able not only to draw his own illustrations, but to complete the engraving himself. This he did both for his natural history articles and for those on prehistoric archieology, the side of his activities that brought him into intimate relations with our Institute. In the seventies, when living at Stoke

^{* &}quot;Petroglyphs of British Columbia," by C. F. Newcomba, M.D., Victoria Daily Times, September 7, 1907, [Newcombe.]

Newington, be discovered a palacolithic floor in his neighbourhood, and communicated an account of it to the Institute, with ample illustrations (Journal, Vol. XIII), and on previous occasions he had brought similar matters before our meetings. When illness forced him to leave London for Dunstable he still pursued his study of prehistoric problems, and succeeded in laying bare another "floor" at Caddington. There can be little doubt that these two discoveries forced him to produce the admirable volume entitled, Man the Primeral Savage, which appeared in 1894. Here he dealt faithfully with the story of Drift man as seen at these two sites.

Large collections of implements and other remains were the natural results of his explorations, and his sense of the importance of the evidence being in a place readily accessible led him to deposit his type series in the British Museum.

From time to time he had made communications on local antiquities to the Society of Antiquaries, and twenty years ago was appointed local secretary for Bedfordshire, and of my own knowledge I can say that, in spite of the many calls on his time and his uncertain health, no one of the many local secretaries of the society could surpass him for the regularity, completeness, and interest of his reports.

For some years past his life has hung by a very slender thread, but he devoted every onnee of his strength to the work of the day, with astonishing courage and persistence, and would seem to have worked up to the last hour of his life.

One of his favourite answements was to gather together the flakes lying on the paleolithic floors, and by replacing them upon each other in the order in which they had been struck off, to reconstitute the flint block as paleolithic man had seen it. In this he was singularly successful, and in one case at least the block is practically complete, showing only the cavity left by the completed implement, which, of course, had been taken away by its maker.

He was the writer of "Early Man in Bedfordshire" for the Victoria County History, and of a charming little book on Dunstable and its Surroundings.

Rewards and distinctions found him occasionally, a small Civil List pension among them, but the most signal honour was the freedom of the borough of Dunstable, an honour literally unique.

His life is ended, but we may rest assured that the spirit that proved him to such untiring devotion to knowledge will still live; an example so excellent must have successors.

C. HERCULES READ.

Polynesia: Ethnology.

n. By 120

The People of Greenwich Atoll, Western Pacific Ocean-Sidney H. Ray.

The Greenwich Islands form an atoll, situated about half-way between Nukuoro (south of the Caroline Archipelago) and the north-eastern coast of New Ireland (New Mecklenburg), in Lat. 1° 0′ N. and Long. 154° 30′ E.°

The group is named Pikaram on English charts, but on German maps appears as Kapingamarangi.

Though so far to the west of Polynesia, the islanders, like those of Nukuoro, north of them, are Polynesians,† and speak a Polynesian language; but up to the present nothing has been recorded of their customs. For the present notes I am indebted to Mr. Revely Hume, of Herbertshöhe, who obtained them as answers to questions from a native named Louis Patterson, at the beginning of 1913.‡ These

^{*} Longman: Gazetter of the World. 1902. Thilenius, in "Ethnographische Ergebnisse aus Melanesien": Nova Asta, Rd. LXXX, No. 1. Halle: 1902, p. 14, gives the position as Lat. 1° 5' N. and Long. 150° 40' E.

[†] R. Parkinson: Dreiseig Jalere in der Südere. Stattgamit, 1907, p. 547, gives a picture of Greenwich Island women.

¹ Cy. Thilenius, np. cht., p. 35.

answers are written in the vocabulary issued by the Ethnographic Museum at Hamburg. Besides the descriptive replies and names, there are many definite statements as to the absence of certain customs and objects which are important with reference to certain theories regarding Polynesian migrations.

The group lies very low and flat, and is only from 6 to 10 feet above sea level. It is expressly stated that there are no streams and no fogs. The products are pandanus (pinn), eccount (nin), breadfruit (knrn), banana (tamo), and taro (tara). According to Thilenius there is no taro, and the banana was introduced by a white trader.* The following plants are definitely stated not to be found on the island: arece palm, betel pepper, gourds, ensuarina, mangrove, sago, eyeas, and ferns.

The fauna is as scanty as the flora. There is a rat (kine), but no flying foxes, no birds of prey, ducks, or pigeous, no snakes, frogs, lixards, erocodiles, or turtle, and no butterflies, beetles, or scorpions. The common word for "mosquito" (nams), is given as the word for "fly" (rams), whilst the mosquito is called ti rams kai tangat, "the fly that bites man," and the louse me hai tangat, "thing that bites man."

The pig is known by its English name (pike), and fowls, native and European, are tatu, the European being mai i tai, "from the sea."

The people practise no tattooing or artificial deformations. Children go naked until puberty. The ordinary dress is a waisteloth of matting made of breadfruit-tree fibre worn round the hips, passed between the legs, and fastened behind. The women wear a softer quality, "same as lavaleva."† No arm-rings or belts are worn. Flowers are worn in a small hole in the ear, and neckinees are made of European beads, but no other ornaments are worn on ear, forehead, or nose. There is no hair dress, but men stick a straight piece of stick (taitmi) in the hair as a comb. Women have no hair stick, and wear the hair short.

There is no collective village name. The houses (have) are all of the same character and built on the shore. The backelors have a separate house (have tune). The house site is covered with fine white cornl, and this forms a border about 6 feet wide, extending all round the house. The building itself is from 30 to 40 feet long and about 20 feet wide. It has no rooms, doors, or windows, and is open on all sides. When it rains mats are hung up. The framework consists of pandanus logs laid on the ground with pandanus posts (toko) at the corners. The rafters are made of narrow split pandanus about 15 feet long and 3 inches by 1 inch in thickness. These are supported on cross sticks of pandanus about 6 inches wide.

The building is tied together with cords made of coconut-fibre. The roofing $(tu\alpha)$ is made of pandanus leaves sewn on a piece of split pandanus in pieces of 10 feet long, and tied to the rafters. Breadfruit wood or pandanus is preferred for house building. The bouses are not ornamented, there are no house-building ceremonies, and all work together in making a house.

Mats are spread inside the house as a floor covering. The bed (ti kahara) is of pandanus matting, and the pillow is a roll of matting. A broom is made of coronut leaves. Rubbish is thrown into the sea or (rarely) burnt. Fire is obtained by friction. A piece of wood about 12 inches long has a groove cut into it, and another piece of very hard and dry wood is rubbed into the groove. These sticks are called han tan ahi. There are no earthen vessels or pots for boiling. Cooking is done in the earth oven (ti issu). The whole family cat together at no fixed times. A wooden bowl (ips rakas) is used for food, a drinking vessel (ips) is made from a coconut shell. Food is seasoned with salt water.

Thilenius, ep. cit., p. 16.

[†] Samoan Israilans, the calino or print wrapper worn round the loins.

Stone chisels, axes (tarai), and adzes (tarai wake) are used. Baskets (kata) and mutting are made by the women.

Both men and women cultivate the garden for family use only. They grow taro, ganogano (a large yellow taro), and bananas.

There is no hunting because there is nothing to hunt. A trap (ti have haha) is used for catching sea-cels, and a fishing net (ti tau), without float or sinker, is used on the reef. There are no fish spears or deep-sea nets. A fish-hook (matau) is made of mussel or turtle shell, and a large wooden hook (matau hahari) is used to catch sharks (tokouri). Fish are poisoned by means of a bechs-de-mer. The skin is scraped and turns red in the water, poisoning the fish.

The cance (waka) is a dug-out with outrigger (am), sometimes with mast (bou) and triangular sail (ra), or paddles (hoe). It is steered by a paddle at the stern (ti hoe muri waka, the paddle behind ship). It has no fireplace or means of conserving water. Cances are made at any time, and there are no ceremonies at the launching.

There are no fighting wespons, no bows, arrows, spears, or clubs. A quarrel between two men is settled by wrestling (trutum) so as to give as heavy a fall as possible. Women use sticks or any other objects to beat (kepaki) one another.

Dancing (twin or rev) takes place in a special ground (ti two). They use no masks, bull-roarers, or musical instruments. There are no secret societies.

No money is used in trading. Sale and purchase is made only by barter (Avri)

There are no dolls or string games.

The dead are rolled up in a mat and buried in the house. A relative sleeps over the grave (ti tab), and wailing (tangilangi) is made for the dead.

The natives distinguish between demons (ti altu) and ghosts (ti karir).

The language is anquestionably Polynesian. A short sketch of grammar and a vocabulary have been published in the Journal of the Polynesian Society.* The vocabulary shows three classes of Polynesian words: (1) Words definitely cognate with Samoan or Maori. (2) Polynesian words which are incorrectly or inexactly equivalent to the proper Polynesian. (8) Words which appear in a kind of "pidgin" Polynesian. I append a few examples of each class:—

(1) Rima (arm), ivi (bone), makariri (coid), vas (foot), fenua (land), tangat and tane (man), noho (sit), rahau (tree), which are the Samoan lima, ivi, makalili, vas, fenua, tangata, tane, nofo, rahau. Kiri (skin), pirau (rotten), rere (run), haere mai (come), bua (flower), which are the Maori kiri, pirau, rere, haere mai, pua.

(2) Langi (day), he-paki (best), kasinga (grass), Samoan langi (sky), Maori paki

(slap), Maori hainga (country).

(3) Words and phrases which are apparently "pidgin" Polynesian are such as the following: Ashes (ti ahe tohoria), fire dirt, instead of lefulefu; cough (mahi matangi), wind sickness, instead of tale; feather (hahu manu), bird clothes, instead of fulu; sinews (nia hare tangat), strings of man, instead of ua.

Many words are of debased or uncertain pronunciation, e.g., hokori, tokowri

(sbark), hanimoe, haere mai (come).

The importance of Greenwich Islands lies in its position so far west of Polynesia proper. According to Churchill it was one of the earliest stations of the original Polynesian migration into the Pacific. "The region nearest to Indonesia in which "we first identify this migration track is north of the equator, at Kapinga Marangi and Nukuoro."

Thilenius regarded the Polynesians of this region as immigrants from Eastern

^{* &}quot;Polynesian Linguistics: III. Polynesian Languages of the Micronesian Border. 3. The Greenwich Atoll," By Sidney H. Bay. Journ. Polynesian Society, XXIV, pp. 69-64 and 92-97. 1915.

[†] W. Churchill: Sissano, Movements of Migration Within and Through Melanesia, p. 169. Washington. 1916.

Polynesia who came in small numbers. "The peopling of the North-western Polynesian Islands quite uniformly has its origin in small beginnings, through the coming to shore of crews of, for the most part, single boats, and through infrequent raiding expeditions. The great majority of the immigrants came hither from the east, from Micronesian and from Polynesian groups."

Churchill's theory requires for its substantiation stronger evidence than that afforded by the mere occurrence at the present time of a Polynesian population in Greenwich Island, Nukuoro, or the other Polynesian Islands on the Melanesian border. These people have lost their distinctive customs (e.g., knva tattooing); they have mixed their language and lost its distinctive idioms. One can hardly conceive the origin of Polynesian culture from a population like that of Greenwich Island, or the jargons of that island and its neighbours as the parent of Samonn or Maori, or any other of the Eastern Polynesian tongues. But, on the other hand, if the contention of Thilenius be right, the decay of custom and the formation of jargon is only what might be expected of a population formed by castaways and immigrants from various places.

S. H. RAY.

Folklore.

Parsons.

The Antelope Clan in Keresan Custom and Myth. By Dr. Elsic 131

In the katsina or masked dances of Laguna an aged kääts (antelope) clansman is always consulted, Lagunas have told me, and members of kääts kanock (clan) in the dance would always be up towards the head of the line of dancers. In explanation of this priority the following myth is related. It begins with a variant of the familiar Pueblo Indian emergence and migration myth, the coming up of the people from the ground and the origin of their katsina:—

"They came to a great body of water. They were going across. There were little children along. As they crossed the children were turned into water snakes and frogs. There was much weeping. As the children changed they would letter go. The chief (goachem) said, 'Keep hold of them.' They held on and crossed the water. When they had crossed, the snakes and frogs turned back to children. That water was the dividing line. The Sungoiakweeheni (Zuñi) went to where they are now, the Acomas to where they are now, the Lagunas stayed where they are now. All remained unhappy over the loss of their first children, the children who had been lost as snakes and frogs. There was always much weeping. Those they thought had become snakes and frogs had become the hatsian, and had gone back to wenimatse.† They saw their parents were weeping for them so they decided to have the humeyoish; go on ahead and tell the people that in four

^{*} Thilenius, quoted by Churchill: The Polynesiau Wanderings, p. 17. Washington. 1911.

[†] Weakwatse corresponds to kathlessele among the Zulli, "god-town," the place where many of the gods live, and to which the dead go.

[‡] The origin myth of the &susyon& is very similar to that of the Zuiti &spews&. "When they first came out there were no kuneyoi&. Their sister was called ackinine& (yellow one). She was very beautiful. The two brothers and achinine& were shead of the others when they came from stipup. The brothers went shead finding the way, their sister behind them. They became "overheated. They found a shady place to sleep. The two brothers woke up first. 'Look at our sister,' said they. Her dress had slipped up over her leg. One brother said, 'It would make no "difference what we did to her. She is our sister." They had intercourse with her. Then all three went saleep again. When they woke up the sister was a very old woman needing a cans. "The brothers were kenseyvish. That is the way they were purished. The people were close on behind. They saw the change. They said, 'Look, what has happened. They must have combetalled that Lagrana was settled in the seventeenth century by immigrants from Zuifi, Tusayan, Sia, and Acoms.

days they would come. At the end of the fourth day they eams, and told their fathers and mothers they had come to show they were not lost in the waters. They lifted up their masks to show who they were. It made their fathers and mothers happy to see they were still living. From then on they were happy and wept no longer. After they had danced they started back to wenimate, the Armeyoish ahead, leading the way. When they got back they found the opening closed very tight. The kumework did not know which direction to take. They decided to go to Minakuya (Salt Lake). They went and said to her, 'We have ' come here, grandmother ' (papa). She said, 'Yes, I suppose you have come for ' something?' 'Yes.' They wanted to get down into the lake to cleanse them-'We want to cleanse ourselves, and then we want to find a father and ' mother who will help us open the opening to wewimatse.' They asked her to let them make a way under the lake back to wenimates. She said, 'No, I can't give you permission for that. Have you decided to become good and do the right?' 'Yes,' But she would not believe them. But she said if they came back upon the fourth day she would have the passage ready for them.

"On the fourth day, when they came back, she had the opening ready for them near the lake. They went in and they passed along the edge of the lake. To this day men take the path made by the kumcyoisk. When they went about half way they tried to go to the house of Osack (Sun). The ground was covered with sharp stones, and as they were barefoot they could not reach the opening. The water that ran down cut their feet. They went as near as they could, standing below his house Osock at last came and looked at them. He said, What do you want, kumeworsh ? They said, 'We want to ask you if you knew anyone who could more * away the great atoms knepleg in our grandfathers (wans) ? * He said, 'I do not know who would open it for you, who could or who would have the right. But ' I think dispi guyan (badger old woman) will tell you.' He was still angry with them, so he would not tell where she lived. When they had started they had on moccasins, but so long had they been wandering, their moccasins were worn out and their feet bleeding. That is the reason the humeyetsh when they appear now are burafoot. They went along unhappy, their heads hanging. They did not know the way to go. They did not know they were passing close to the place of gamesh's guyau (spider old woman) natil she called, 'Popa! papa! come here.' They looked all about, but could see no one. She sald, "He careful, pope; do not step on me. I am under this spectruck' (a big weed). There she was. She said, "What are you doing, news (my dears), and what do you want?" "We are hunting for someone who has the right to open the way for our name. We went to Osach, but he would not tell us right. We did not know then where to go.' She said, "I will tell you who has the right to open that place. She lives over there in that big hole. The reason Couch would not tell you who was the head of the Astrina is because you had made everyone angry by your net. Now I have told you, don't tell I have told you. They said, 'Drumisach, pape (goodbye, grandmother).' They gave her a piece of meat they had with them. As they neared the place where dispi gayou lived there was a big stone over the opening. One of the kumeyotah said, 'I think this is the place?' They said, 'Chima (down there), we want to come down.' They said it three times. She said, 'Come down; come on in. They said, " Kwasti, sais (mother), naishdia (father). They said, 'We have come to you. We have been told you are the head; you are mother and father both to the Asteins. The opening has crusted over hard and they eat't get out. We want to get our sans out. 'Who teld you I lived here? Who teld you this was my home?" * Gamoshit guyon, she told us.' She was indignant that [191]

gamesāk had told. After a while she felt sorry for them and said, 'Have you then 'decided to mend your ways and do the right? You have come to find out who is the mother and father of the katsina. Go back and tell your nana to be 'waiting and be happy, because on the fourth day I will come. I will take my little 'kāātsi (antelope) outside with me, and we will open the opening for you.' They went back to Salt Lake and into the opening she had made for them and back to wenimatse. As soon as they went in the opening crusted over tight. Instead of four days it was to be four long years before diapi gayan came. They waited and waited, wondering why diapi did not come.

"At last the four years were almost past. Dispi wanted her husband to go with her, but he held back. Finally she said she would go and take with her her antelope. He was big now with big horns. She started. They stopped to see Osach. (When the kumeyoish had talked to diupi guyou they told her Osach was angry. She said, 'On my way I will have to see Osneh, for he is over all of us.') He told her what paints they should use on their masks, the red and the turquoise green and how to mix them. After several days of hard travel they reached wenimatee. They found the opening crusted over so hard that although she pounded it she could not make any impression on it. So Kuntsi said, 'I will try.' He began to butt it and great slabs of earth fell off. Finally he had it open. They stepped in. All along the wall the katsina were sitting sad, their heads drooping. They had been suffering there all these years. As she stepped in, she said, 'I want to 'know who is your head.'. Go'gaguia" spoke up and said, 'I am the head here.' Kuntsi started for him, picked him up on his horns and tossed him out of the opening. He was killed and he landed somewhere nean skiti kuganishe (the morning star). That is why that star is always red. She asked again who was the head of the hatsing? None answered. Everyone trembled and was frightened. She told them to renew their masks. She did not say she had the paints with her. They tried to use their own but they did not stick. She mid, 'I have some paints I have brought from osack gama (sun house).' The colourings she got from Osach were the best. They used them on their masks. It made them beautiful. Their own paints they discarded. To this day they use the paints from osack gama. That is the reason kauts hanoch has to this day charge over the katsina, because he opened the opening for the katsina. Next to kääts hanoch comes diup hanoch. These two lead in the dances and all disputes are referred to them. Kants kanoch was to be always the leading one, then disp hanoch."

At Laguns ceremonialism or sacerdotalism is disintegrated and the social organisation is considerably Americanised. Clan exogamy persists, but the clan supremacy which appears to have been a Keressan character† has yielded to a more representative form of government.‡ In Acoma, however, clan supremacy or autocracy has held its own, and it is the kääts kanock which governs. The men of that clan choose from among their number the so-called cacique or high priest, and the principales, a council of ton, are also of kääts kanock. Cacique and principales hold office for life. The tenientes, governor and lientenants and sheriffs, as the war chiefs are

As a masked personage be carries in one hand a flint. Go'gagete had a brother, Governotes (Griever). With their long flints they had cut the ground and many people had been lost. That is the reason Kests had beened Go'gagete. Governotes sat grieving over his brother. He kept pulling out his hair until only a few strands were left. Thus as a masked personage is be represented. Formerly this myth was dramatised within the estufa.

[†] Stevenson, M. C.: "The Sia," p. 16, XI (1889-90), Annual Report Bureau American Standary.

[†] Parsona, E. C.: "Notes on Acoma and Laguna." MS, to be published in American Anthropologist.

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sometimes called, are all appointed annually by the eacique, by "his brothers and uncles." To the principales the tenientes would refer any important question. The people have four ceremonial hunts a year for the eacique and they bring in his harvest. In the allotment of farm lands he has complete say, or rather not he but his "brothers and uncles." In the words of my Acoma informant, "the cacique " himself does not go round, he knows nothing about the people; it is his brothers " and uncles who find out for him and tell him what to do "-clan autocracy indeed. ELSIE CLEWS PARSONS.

Haddon. Ethnography.

Note on the Gogodara (Kabiri or Girara.) By Dr. A. C. Haddon. I much regret that in my paper on these people (Journ, Roy. Anthr. Inst., XLVI, 1916, p. 834) I omitted to refer to a paper entitled "A Description of the Girara District, Western Papua," by W. N. Besver, in The Geographical Journal, XLIII, 1914, p. 407. The greater part of this communication consists in an excellent account of the physical character of the country travelled over by Mr. Beaver, with a short list of the characteristic animals inhabiting is. In order to render my account of the people as complete as possible, I now give briefly all the additional ethnographical data supplied by Mr. Beaver : He says : "I am not prepared to offer " any theories as to the racial origin of the Girara people; but it is certain that " their language is Papuan, not Melanesian nor Papuo-Melanesian. The people " themselves say that not far from Gaims [a village on the Fly river], a man " married a dog, and had as offspring three sons, the two elder of whom settled at " Domori [an island in the Fly river] and Pagona [an adjacent riverain village], " and were the ancestors of the people of those places, whereas the youngest, having " quarrelled with his elder brothers, went inland, where he saw that the country " was good, and decided to make a village. In spite of their dog ancestry, this " animal, as far as I am aware, is not the totem of any of them, their totems being " five in number : the pig (Itira), the pigeon (Boboa-I think this is the Goura " pigeon), the alligator [crocodile] (Dupa), the cassowary (Goragora), and the snake " (Amura). The totems were first given out to the people by a hero-ancestor called " Ibari. The totem enstoms do not differ materially from those of other western " tribes, and are patrilinear." The crocodile and the pig seem to figure largely in the tribal life of the people, well-carved representations of the former appearing on the canoe prows, and of the latter on the house steps.

The people are of medium stordy stature, and seem tolerably healthy, although skin disease (Tinea imbricata), yaws, and a good deal of elephantissis occur. The hair is shaved back, showing a high narrow forehead, and a small corkscrew goatee beard (ene) is worn. Mr. Beaver refers to the conical fibre hats decorated with feathers worn by most of the men, while others wear skull caps of network. The women cover the head, face, and bosom with a veil of net, which is stated to be a mourning dress. The other dress is seanty, and consists of a long tail of coloured grass woven on to a plaited cane belt, drawn tightly between the legs and tucked in the belt again behind. Neither sex tattoo, but cicatrices are in some instances

"The chiefs have a little authority. The late chief of Barimo [the central village of the district], combining the dual functions of chief and sorcerer, was, as far as I saw, the one man in the west implicitly obeyed by his people. A chief is succeeded by his brother, not his son, and the son succeeds after the death of his uncle. Polygamy is the rule, the number of wives occasionally being 14 or 15. Divorce is uncommon."

Mr. Beaver has seen women's houses as well as the large communal house, of

which each village usually consists. The central part of the house, which is from 4.58-6.1 m. (15-20 ft.) wide or more, is allotted solely to the men, as are also the decors at each end. The only occasion on which women use these doors is during the ceremony attending the dedication of a new house. At each side of the central space are tiers of cubicles, two deep and two or three high. These are approached by ladders, and are used by the women and children, having entrances from the side. The dimensions of the Dogona house are 152.5 m. (500 ft.) by 35.68 m. (117 ft.), and 21.35 m. (70 ft.) high.

Sago and fish are 'roasted in sago leaves or in canes, and, with cocounts, form the staple diet. There are huge fields of sago and eccounts wherever it is possible to plant. Other vegetables used as food are tare and yams. Sweet potatoes and hananas are not largely cultivated, chiefly because the area of suitable land is not very great. They are planted in beds, and protected from the sun with shade sheds, as are sprouting eccenuts; "the intelligence of these people in their methods of agriculture " is, indeed, of a high order. They are head hunters, but not cannibals. Betel not " mixed with lime is chewed day and night with something almost approaching " caremonial. The lime is obtained from the coast, to which trading expeditions are " made to buy shells for the purpose of burning. . . . The women are expert at " fishing. They use either a not on a cane frame, something like a butterfly net, " or else a large trap made of black cane, looking very like a lobster pot. These " traps are from 5 to 7 ft. high [1.524-2.185 m.]. . . The yellow cuseus and " small flying phalanger are often kept as pets. . . Very fine tobacco is grown " by the natives and put up in rolls; this is traded principally with Domori and " the Fly river. . . . Three varieties of stone club have been seen-the star, the " disc, and the pine-apple-but stone clubs are rare in a region where one may " travel for many miles without seeing a stone. A wooden club, usually of the pine-" apple type, and made of very hard brown wood, is in more general use. The " drums are of decidedly original type, and on certain ceremonial occasions a drum " some 7 ft. [2-135 m.] is used. This is hold by one man, and beaten by a second " with a wooden mallet. The head of the drum is of wallaby skin."

Mr. Beaver gives four excellent photographs, one of men and women with their characteristic costume, one of the carved prow of a ceremonial canos, one of a veiled woman standing by a large fish trap, and one of a man wearing a large mask of the type described by me; he is wearing a fringe petticoat, and holds in his hands a drum of the characteristic Tugeri (or Bugi) type (cf. Journ. Roy. Anthr. Inst., XLVI, p. 351). It is unfortunate that Mr. Beaver does not inform us whether this particular drum was really used by a "Girara" native — one constantly comes across photographs in which a person is holding an implement which is not strictly appropriate. He also gives a map of the district.

A. C. HADDON.

REVIEWS.

India: Linguistics.

Hutton.

Rudimentary Grammar of the Sema Naga Language, with Vocabulary. By J. H. Hutton, L.C.S., Assistant Commissioner, Mokokchung. Shillong: Printed at the Assam Secretariat Printing Office. 1916.

This book gives a convenient summary of the grammar, and a useful vocabulary of the language spoken by the Sema people, one of the central tribes of the Western Nagas in Assam. (Cf. Map in Man, 1917, 74.) The language of the present work differs somewhat from that shown in the Linguistic Survey of India (Vol. III, Pt. 3, p. 222 ff.), which is said by Mr. Hutton to be apparently that of the Lozemi and the Sema in the Dayang Vailey, whilst the present volume represents that speken by the Zümemi and the Sema of the Upper Kaliki River.

The author deals with the grammar seriation, with copious examples. In the introduction he discusses the difficulties of pronunciation, especially those caused by alisions, the inversion of syllables, and the prevalence of tones. The latter are not discriminated in the grammar and vocabulary as printed. There are two sets of vocabularies, one classified in subjects, the other alphabetical. Both are English-Sema.

An interesting section is devoted to the peculiar back-slang of the Sema. In this the order of words in a sentence or of syllables in a word is inverted or altered so as to make the language meaningless gibberish to anyone not familiar with the slang. This practice causes infinite diversity of speech.

The book will be exceedingly useful to all who come into contact with the Sema people, and will also be of much interest to the student of Indian linguistics.

S. H. RAY.

Russia. Tallgren.

Collection Tovostine des Antiquités Préhistoriques de Minoussinsk, conservées chez le Dr. Karl Hedman a Vasa. A. M. Tallgren. 4to. 93 pp. 12 plates. Helsingfors. 1917.

The author has here largely added to our obligations to him for his former work (Max, 1917, 88). In the present publication of the Société Finlandaise d'Archéologie he has given a general account of the Central Siberian civilisation, specially known at Minussiusk; he has summarised the contents of the European museums concerning each class of object, and he gives in French an outline of the results of the inaccessible Russian Memoirs and a bibliography. All this is from first-hand study, by excaviting in Siberia and visiting museums. We owe much to him for thus assisting Western students of archeology. The material is so important, both as covering a large area of the ancient world, and as lying between the Chinese and Western civilisations, that an outline of it is needed here, and anyone studying the Bronze Age must work over the original memoir.

There are first three pages on the history of the collection, and this tells so much as to present conditions of archeology that it cannot be passed over. I. P. Tovostine, a native of Yaroslav, set up as a copper-founder near Minusainsk; a portrait of him here would pass anywhere for an East Coast Scot. He had ancient tools continually brought by the peasants to be melted up, but be saved them and formed a collection. Various collectors during the last thirty years have been supplied with sets of hundreds of objects. Finally over 1,000 bronze, iron, and other articles were offered to Helsingfors; the price was difficult; Philadelphia began to negotiate; M. Tallgren appealed to Finnish magnates; and at last Dr. Hedman took the collection for £220 to ensure keeping it in Finland. Now, M. Tallgren, entrusted with making a scientific catalogue, has used it as a text for a general work on the early history of Central Asia. There are 31 pages on the general historic study of the archeology, 42 pages on the various kinds of objects, a full-description of plates, and a bibliography.

The earliest historic point of the steppe dwellers is the Chinese mention of Khakazes, believed to be Kirghizes, in 95 B.C., so there is no help in dealing with the Bronze Age. Some 40,000 objects of the ancient periods are now in collections, of which a summary is given. The three principal regions of early civilisation in the North are the Gulf of Finland, around Kasan, and around Minussinsk, which is equidistant from the Euxine and China, from the Arctic and India. In the previous catalogue the Kazan antiquities were described. Here the differences between those and the present collection are tabulated. In all the main characters there is a sharp difference between the Russian and the Siberian products. It is to China, Bactria, and Persia that the work of Siberia is mostly due. For the date of the Bronze Age

there, some resemblances to the work of La Tène are noted, and the conclusion is that the Bronze Age of Siberia began about 700 s.c. (p. 20), and ended about the first century.

The megaliths are described, and the system of burials. The earliest graves contain contracted skeletous painted with other, flint weapons, rings of scrpentine, and necklaces of suimal teeth. Such are found in North Mongolia from the Yenisei to the Amur. They are entirely under the surface, without any mark. Similarly bronze-age graves near Tomsk are entirely hidden, and only found accidentally, The visible graves, called kurgans, are low mounds, a foot or two high and 20 feet or 30 feet across; upon this is a rectangular enclosure of small slabs of stone on edge, and tall stones at the corners; within the enclosure are several stone cists with large cap stones which are slightly snuk in pits. In two graves out of four described there was one skeleton upon the cap stone, and another below it in the cist. In the cists were bronze knives and buttons, pottery, and animal bones of food offerings. In the Iron Age the kurgans are larger, 5 feet to 15 feet high, covering a grave 3 feet to 6 feet deep and 15 feet or 20 feet long. In the grave is a mass of skeletons, sometimes pell mell, otherwise in two or three layers. The sides of the pits are lined with beams, and the top covered with birch bark. The whole had been burnt and then earthed over. Such begin at the close of the Bronze Age, about the first century B.c. One tomb contained a hundred skeletons in two layers, and 122 miniature weapons of bronze. These models show that such collective burials were not due to battles, but were deliberately buried with offerings made on purpose. After this came the great migrations, and then the Turki or Uigur period, of which there are multitudes of inscriptions of 600-800 A.D. The pottery of different ages has not yet been studied or classified, as the recorded graves are but few.

Of decoration, the high relief line patterns of Russia do not appear; the Siberian designs are curves, scrolls, and spirals. In the Stone Age animal carvings of stone were usual; but the bronze figures were copied from outside influences. The gryphon, so usual in Scythian and northern Greek work, is believed to have come from the Babylonian dragon. The Mykensan winged sphinx is assigned to the same source, but this is improbable as it is at one with the Egyptian, which belongs to the art of the Nile. In the later Iron Age animal forms disappear, and plant forms are usual. This is assigned to Greek influences, like the prevalence of ivy and vine patterns in Roman work.

Regarding the people, the lack of weapons among the bronzes points to a pacific civilisation, and the uniformity of the graves, without any specially rich, shows an equality of condition, but this would not preclude there being a large slave or servile population. In the Iron Age came the Turk invasion, when bronze was used by the aborigines, and iron by the military caste. Some general remarks are made as to the confederations of Germanje tribes which overthrew the Empire, being paralleled by the Scythic and Turkic federations at the same date, which impelled the Germans forward. Nomad empires grow very rapidly owing to their habit of movement, but they decay as rapidly. Hence artistic work is quickly obtained by the employment of hired or captured workmen, but has no other connection with the people.

The region east of the Caspian, for some 600 miles, was occupied by Aryans; the same stock appears in the Massagetae, the Scythians who about 700 n.c. moved to the Don (also those occupying Palestine?), the Samatians in Hungary, and the Alans of the Caucasus. They may have pushed eastwards as far as Minnssinsk. The original source of the Aryan was probably on the Oxus. The source of the Turk is from the Pamirs eastwards to the Amur, and they crushed the Greek civilisation in Bactria, 130 n.c.

The technique of the bronze work is considered. The mark of cloth on the back of cast bronze is referred to its being cast on a cloth in the mould. This is impossible, as the liquid metal would burn up the cloth. The meaning of the impress is that the wax model was worked on a cloth, and by the circ perdu process the metal necessarily took the same form. Tinning bronze was known; there is only a small amount of gold, and silver is rare. The Scythic abundance of gold was therefore not from a northern source, but probably western. In the analysis tin is almost always present, from 6 to 14 per cent.; zinc is rare, up to 14 per cent.; lend is never more than accidental, 1-3 per cent. For a mirror, 22 per cent of tin was used, to get a hard white alloy-like bell metal.

The details of each kind of tool are described in the second part. The socksted axes are usually ribbed outside. They are supposed to originate in Hungary, and when imported into Siberia they influenced the stone axe forms. The daggers are always self-handled, a type only known in Spain and Sicily in the west; the plain blade and the tang stages were over and past before the dagger reached Siberia. The handle of the finest dagger shows by the lines of the decoration that it was moulded from a carving in bone (page 41). The knife forms are very varied, all self-handled, and nearly all girdle-knives for suspension. While there are 3,000 in the Minussinsk museum, there are only half-a-dozen from Russia. The sickles are all short, hardly any over a foot long, and rather to be called curved knives, for a nomad people would not need to reap corn. There is one short-socketed double saw, very anomalous. Also a single spear-head, 41 inches long, of foreign source. The arrow-heads abound; the Scythian arrow is considered to have spread from the Some fine halberds occur, and models with animal figures on the backs; they are supposed to start from Persia. The borse-bits are very common, just simple links with side rings; some with secondary holes at the sides probably had bone or wood side pieces put through them. Of mirrors there were two centres, the Mediterranean type with an edge handle, from 4,000 p.c., and the Chinese from 300 p.c., with a knob in the centre of the back; all the Siberian come from the latter. The brouze cups known as Scythic are found from Hungary to China; they are east in one with the short conical foot, and the two handles on the brim were cast on after-The usual outfit, therefore, was that of a steppe hunter, bow and arrow for shooting gams, and a knife to cut it up; the spear and sword were not wanted.

Buttons were varied, always deep. A skeleton cube open on all faces, or closed on one face, or a deep stud on a base plate were usual. A wide disc, with cross bar on the back, cannot have been for a button, as one form has six discs projecting around it, showing to be an ornament, not suited to a loop or hole. Spiral coil bracelets were usual. Pendants are of animal form, strongly Bactrian in style, or perhaps from the Chinese derivative of the Bactrian work. Buckles have usually fixed tongues, which is the earlier type, Greek, Scythic, and Swiss Celtic. This is the B.c. form, while the A.D. form is the hinged tongue. Stirrups are of late origin; they began in Central Asia, and were common in China by 477 A.D., but they did not reach Europe till 600 A.D. There is no instance of a Roman, on sculpture or coin, using a stirrup. It will be seen from this slight summary what an important extent of material is treated in this valuable memoir. W. M. FLINDERS PETRIE.

Canada: Geological Survey.

Summary Report of the Geological Survey, Department of Mines, for the Calendar Year 1916. Ottawn: 1917. (Authropological Division, pp. 387-398.)

British anthropologists will note with admiration, not unmixed with envy, the 1916 Report of the Anthropological Division of the Canadian Geological Survey. Although its home, the Victoria Memorial Museum at Ottawa, was occupied by the Dominion Legislature, and its expenditure was restricted by the economy enforced by war conditions, the Authropological Division has done a large amount of exceedingly useful work. The collections made during the year included a large number of Eskino' and North American artifacts, phonograph records, photographs, and MSS, of folklore and ritual. Field work was done with deputations of chiefs from Nass River; in Nootka, French Canadian, Ojibwa, and Tahltan folklore, and in the ethnology of the Canadian Arctle. Research work dealt with time perspective in aboriginal culture (Sapir), Tshimshian and Iroquois claus (Barbeau), Iroquois foods (Waugh), and the Sociology and Religion of the Ojibwa of South-eastern Ontario (Radin). The sections of Archaeology and Physical Authropology show similar systematic work.

The Anthropological Division of the Geological Survey deserves the warmest congratulations of anthropologists on their 1916 record. SIDNEY H. RAY.

Anthropology.

Migeod

Earliest Man. By F. W. H. Migood, F.R.A.I., etc. Kegan Paul, Trench, Tribner. 1916. 3s. 6d. net.

In Earliest Man Mr. F. W. H. Migeod makes a somewhat unusual contribution to our knowledge of Man. He gives us what he considers was the history of Man from that early date on which he broke away from the Simian group, up to the time of the earliest authenticated records, up to, in other words, the Palucolithic period. He deals, therefore, with a stage of our development about which few, if any, facts exist, but about which there is in consequence ample scope for speculation. Speculation, to be permissible, must be informed, and this we can safely promise readers of the book will be found to be in this particular instance the case. The author is arriving at his conclusions avails himself of what is apparently an extensive fund of information derived from his own personal experiences with primitive man, apes, and other members of the tropical fagure.

The chief factors which promoted Man's development are, in the opinion of Mr. Migeod, the relatively long period fluring which pregnancy lasts in the human species, the slow rate of propagation, the helplessness of the child at birth, and its dependence on its parents until at any rate the age of puberty. Although it is more than probable that in these respects Man is not exactly what "proto-Man" was, we may, we think, safely allow that these factors were sufficiently pronounced to determine certain developments. They entailed, for example, as Mr. Migeod points out, protection and the creation of a home. With the inception of family life, foresight in the way of food storage would become necessary, and such primitive arts as pottery making, basket making, and fire making may very well have arisen in some such way as Mr. Migood infers from the contemplation of occasional occurrences in Nature. Dress originated, the author believes, in the desire for adornment rather than in the desire for protection. The chapter on the "Origin of Speech" is of particular interest. Mr. Migeod assumes that "cries to his mate " would be the first form of voluntary utterance by a sentient being, and cries of " pain or distress the first involuntary ones." He thinks, again, that "the means " of expressing the relative position of place would take precedence of time." We find, however, some difficulty in scoepting the view that " 100,000 years may have " clapsed between the acquisition of the means of expressing the fact that a stone " had been chipped and that it was going to be chipped." We are somewhat curious, again, to know how Mr. Migeod came to know that Homo primigenius had legs which were bandied and eyes which were black, small, and piercing. These

small excesses in the way of perhaps too-confident speculation may, however, be pardoned to one who has given us so interesting a book on so fascinating a subject. WM. WRIGHT.

Glastonbury: Archæology.

Bulleid: Gray. The Glastonbury Lake Village: A Full Description of the Executations and the Relies Discovered, 1892-1907. By Arthur Bulleid, L.R.C.P., F.S.A., and Harold St. George Gray, with an introductory chapter by Robert Munro, M. A., M.D., LL.D., with chapters on "The Human and Animal Remains," by W. Boyd Dawkins, M.A., D.Sc., F.R.S., and J. Wilfrid Jackson, F.G.S.; "The Bird Bones," by C. Andrews, D.Sc., F.R.S.; and "Plants," by the late Clement Reid, F.R.S. Two vols. Pp. xl. + 724. Published by the Glastonbury Antiquarian Society. 1911, 1917.

It is doubtful whether any excavations hitherto carried out in this country have equalled in importance those undertaken at Glastonbury in 1892 by Mr. Arthur. Bulleid, and carried out systematically by him, with the aid of Mr. St. George Gray during the later years, until 1907, for they have opened out a fresh chapter in the early history of our country, and revealed to us with surprising completeness a civilisation hitherto known only by chance finds. The two sumptagus volumes under review not only contain a full narrative of the work, showing how carefully it was conducted, and that no fragment of evidence calculated to throw light on the life of the time was neglected, but it is also an admirable summary of our present knowledge of the Early Iron Age in Britain.

By far the most interesting portions are those contributed by Mr. Bulleid himself. His general description of the environment of the village, accompanied by maps on various scales, is a model of how such a subject should be treated, while his detailed description of the village itself is no less interesting. He has also contributed chapters on the wooden objects, the pottery, the mill stones, and other items of lesser importance.

The other articles of human workmanship are treated by Mr. St. George Grav. with his usual care, and in these chapters will be found lists, often exhaustive, of all articles of similar date and type found in these islands, thus forming the basis of a much-desired corpus.

But the excavators realised that the complete picture of this culture could not be obtained alone from the works of the men themselves, and the late Mr. Clement Reid has contributed a chapter on the vegetable remains, with special reference to the cultivated plants, which gives us usoful information as to the progress of agriculture at that date, while Professor Boyd Dawkins and Mr. Wilfrid Jackson, in their chapter on the wild and domestic animals, complete this picture.

The human remains found were not numerous, and mostly in an imperfect state. while, in spite of many efforts, the excavators failed to find the cemetery. Professor Boyd Dawkins has reported on these fragments, and from the burnt remains of one body, found outside the enclosure, has suggested that cremation was the custom in vogue for the disposal of the dead. As, however, it seems clear from other evidence that he cites that cremation was the custom in the east and inhumation in the west during this period, and as, moreover, a number of skeletons of children were found, evidently buried in the floors of the houses or just outside, one is tempted to question this conclusion, resting, as it does, upon the burnt remains of one body only, and those not enclosed in an uru, and which might well be the remains of some victim of a conflagration, or of some superstitious practice, or perhaps of some form of capital punishment,

Dr. Munro contributes an introduction giving an account of the work, and

describing fully the evidence that led Mr. Bulleid to his discovery, as well as the general conclusions to be derived from the excavations. Both he and Professor Boyd Dawkins have much to say on the early ethnology of Britain and Europe generally, some of which will not readily be accepted without modification by many other authorities. It seems a pity that the custom of using tribal names for races should still be continued, especially when such names have only an exact sense in relation to linguistics. As the identifications of race with language, even if they can ever have existed at all, are still a matter of considerable dispute, such terms as Celtic or Teutonic race, more particularly Goidelic race, only lead to confusion of thought; the same may be said of the Basque race, as the modern Basques are of two types, and it is uncertain to which, if to either, the language originally belonged. The term Iberic is less open to objection, and has the advantage of long use, invariably in the same sense, but of late years the term Mediterranean has, advisedly, been substituted for it by most writers, and there are advantages in adhering to a uniform practice.

Again, it has been shown more than once that the so-called Bronze Age men, though they had broad heads, were racially distinct from the Alpines of Central Europe. As bronze objects are by no means always found with them, and there is no reason for believing that all the inhabitants of Britain throughout the Bronze Age were of this type, the name Bronze Age men is perhaps a misnomer, while, as it has been shown that they introduced Beakers into this country, the term Beaker-men or Beaker-makers seems to be more appropriate and more exact.

The most striking thing about this report is that it shows what admirable work may be done by a young amateur who is keen and has a thorough knowledge and love of his own region, for such was Mr. Bulleld when he first made his startling discovery, as the result of careful, reasoned deductions, and began his excavations, a quarter of a century ago. This record should be a great encouragement to the young investigator of the present day, and spur him on to do likewise.

H. J. E. P.

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The Glastonbury Lake Village: A Full Description of the Executions and the Relies Discovered, 1892-1907. With chapters on the "Human and Animal Remains" (W. Boyd Dawkins and Wilfrid Jackson), "The Bird Bones" (C. W. Andrews), and "Plants" (Clement Reid). 12½ × 10. Vol. 2, pp. 358-724. 43 Plates and many Illustrations in the Text. Glastonbury Antiquarian Society. 1917. Vols. 1 and 2, 63s. net. (Purchased.)

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